DOCUMENT RESUME

ED 318 821 UD 027 393

AUTHOR	Grannis, Joseph; And Others
TITLE	Evaluation of the New York City Dropout Prevention Initiative. Final Report on the Middle Schools for Year Three, 1987-88.
INSTITUTION	Columbia Univ., New York, N.Y. Inst. for Urban and Minority Education.
SPONS AGENCY	New York City Board of Education, Brooklyn, N.Y.
PUB DATE	17 Apr 89
NOTE	221p.; For 1986-87 report, see ED 306 330.
PUB TYPE	Reports - Evaluative/Feasibility (142) -- Reports - Research/Technical (143)
EDRS PRICE	MF01/PC09 Plus Postage.
DESCRIPTORS	*Attendance; *Community Organizations; *Dropout Prevention; Dropout Programs; High Risk Students; *Middle Schools; Program Evaluation; *Program Implementation; Secondary Education; Urban Schools
IDENTIFIERS	Collaboratives; *Dropout Prevention Programs; *New York (New York)

ABSTRACT

This document, the first part of a two-part evaluation of the third-year implementation of New York City's 3-year Dropout Prevention Initiative (DPI), is the final evaluation report of implementation of the DPI middle school component, called the Dropout Prevention Program (DPP), conducted in 29 schools. Case-management services and some curricular support were provided to targeted high-risk students to improve their attendance and to increase the number of courses passed. Services were delivered entirely by Board of Education staff in 18 of the schools (the School-Alone Model); Board of Education staff and community-based organization (CBO) staff delivered services in 11 of the schools (the CBO Model). Information was gathered from staff and student surveys and interviews, classroom observation, and student and staff records. Overall, the high number of unintended and unwanted program outcomes found in most schools and the low number of positive outcomes found in a few schools indicate the need for a major reconfiguration of the dropout prevention effort. Recommendations for improvement focus on reassessing the cost-effectiveness of using CBOs, improving communications with students and their families, addressing curricular reform, and strengthening individual program components. Statistical data are included on 65 tables. (FMW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED318821

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Erwin Flaxman
IUME

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EVALUATION OF THE NEW YORK CITY DROPOUT PREVENTION INITIATIVE

FINAL REPORT ON THE MIDDLE SCHOOLS FOR YEAR THREE, 1987-88

by

Joseph Grannis, Project Director
Carolyn Riehl

with

Selina Bendock
Carol Gayle
Joseph Gerics
Judy Goldwater
Kenneth Jewell
Bruce Jones
Michele Reich
Diana Stewart
Miriam Westheimer
Denise Willis

Institute for Urban and Minority Education
Teachers College, Columbia University
New York, N.Y. 10027

April 17, 1989

UD 027 393

Teachers College Dropout Prevention Initiative Evaluation

1987-88 Final Report
Part One: Middle Schools

Executive Summary

In its first three years, the middle school Dropout Prevention Program has shown a greater capacity to employ auxilliary staff and implement attendance outreach, counseling, and alternative education services than to improve students' attendance and percent of courses passed. Analysis of the data for 1987-88 has revealed a number of unintended and unwanted results. Positive outcomes in a few schools suggest directions for change. Overall, the results demonstrate the need for a major reconfiguration of the dropout prevention effort. This process may already have begun, as preliminary information from this evaluation has been used to draw up guidelines for 1989-90.

Program Implementation

1. In 1987-88, the Dropout Prevention Program (DPP) was implemented for the third year in 29 middle schools. (The DPP is a part of the larger New York City Dropout Prevention Initiative, or DPI.) In 18 of the schools services were provided entirely by Board of Education (BOE) staff--the School-Alone (SA) model; and in 11 schools programs were staffed by both BOE and community based organization (CBO) personnel--the CBO model.

2. The largest numbers of services recorded on Monthly Summary of Service Reports (MSSRs) were in the areas of telephone and mail. In a (relatively) high middle range were extended day, individual student guidance, home visits, student conferences, and group guidance. Relatively few attendance incentives were recorded, while high school linkage, parent guidance, health record review, vision screening, hearing screening, and physical examination were all in a very low range.

3. The monthly averages of services tended to be highest between January and March, lower between September and December, and lowest between April and June. This timing of services seemed to be geared more to BOE priorities than to students' needs.

4. A Pupils with Compensatory Education Needs (PCEN) program of remedial instruction in reading, mathematics, and/or writing was implemented in 27 of the schools. From a funding standpoint, PCEN was not a DPP component. However, it was the vehicle used to fulfill a requirement that there be an alternative education

component in the DPP. Selection and programming of eligible students, appointments of teachers, securing appropriate materials, and approvals of budgets for PCEN absorbed much of the energy of school staffs and the Office of Student Progress (OSP), and was not completed until November or later in half of the schools. Enrichment courses complemented the PCEN courses in eleven schools.

5. Students who were clustered (programmed together) for PCEN remedial instruction and/or enrichment classes received substantially more services than students who were not clustered. For direct services to students who were present in school, this reflected the fact that it was easier to access students who were clustered. For indirect services, largely attendance outreach, the finding may reflect a greater commitment to students who were better known because they were scheduled for classes together.

6. The pattern of clustered students receiving more services than not-clustered students applied equally in the CBO and the SA schools, suggesting that CBO and SA staff accessed students very similarly.

7. Pupil Personnel Committees (PPC) functioned in all 29 schools and in many of the schools were appraised by staff as very valuable for planning interventions for students. However, PPC decision sheets showed that students' deficient attendance and academic performance were attributed almost exclusively to home, health and pregnancy or child-care, discipline and personal problems, rather than to problems in the academic program and teaching of the schools themselves.

8. The Office of Student Progress conducted a very thorough monitoring and documentation of the implementation of the program. The development of an Incentive Point System in all of the schools combined general OSP guidelines with school-level discretion in a way that demonstrated the potential for mutual decision making. OSP's intention to develop alternative education in a similar way was subverted by New York State's late and narrow specification of PCEN requirements. OSP's monitoring of attendance outreach and guidance and counseling focused more on the schools' recording expected levels of these services than on the relationship between the services and student needs and outcomes.

<u>Characteristics of Students Served</u>

9. A total of 4752 middle school students were enrolled in the Dropout Prevention Program in 1987-88. The average proportion of a school's students enrolled in DPP was 16.3% for the 29 schools overall. The average number of students was 185 for schools in the School-Alone model, and 129 for schools in the CBO model.

10. Slightly more of the students were male (53%) than female (47%). Almost half (48%) of the program students were overage for their grade, probably reflecting the fact that many students had been held back in some prior grade(s).

11. Just over half of the students (53%) were enrolled in the program on the basis of prior year attendance alone. The next most frequently used selection criterion was "principal's discretion" (11%).

12. The average prior year (1986-87) attendance for students was 77%. The average rate of passing courses in the prior year was 70%, that is, about three and a half out of five courses.

13. Only eight percent of the 4752 program students were listed on Board of Education files as being limited-English proficient (LEP), using the Board's criterion of scoring at or below the twentieth percentile on the Language Assessment Battery in 1986 or 1987. However, an additional three percent had scores between the 21st and the 39th percentiles and another eleven percent had taken at least one standardized test in an alternate language version in 1986 or 1987. Thus 22% of the program students had some indicator of limited or marginal English proficiency.

14. Approximately one-third of the students had one recorded risk characteristic, another 28% had two, 20% had three, and 7% had four.

15. There were large differences between schools in the targeted students' levels of risk on all of the dimensions.

Program Outcomes

16. The average attendance change for program students was -3.4%, the equivalent of a decline in attendance of about 6 days a year. Average attendance fell from 77% in 1986-87 to 74% in 1987-88. This is about the same as a -2.9% loss that has been found for a control group of 2285 students who were located in the same 29 schools in 1987-88 and who were eligible for services on the basis of prior low attendance but were not enrolled in the DPP.

17. Overall, 47% of the program students improved their attendance, with an average improvement (for these students) of +9.4%.

18. The average change in proportion of courses passed was +1.8%, the equivalent of passing about one-tenth of a course more in a year.. The average proportion of courses passed by program students was 70% in 1986-87, and 73% in 1987-88. (The numbers do not correspond exactly because students missing data for one year or the other are not included in the change score.)

19. Of those students who had failed at least one course in 1986-87, 63% met the program objective of passing more courses the following year. The average change for these students was +40%, or about two courses per year. Of *all* students in the program, 37% passed more courses in 1987-88 than they had the previous year, 32% passed fewer, and 31% stayed the same. Overall, the program may have prevented a further deterioration of courses passed.

20. These results for Year Three of the Dropout Prevention Program were more like the results for Year One than Year Two and thus indicate that the program did not have a positive trajectory. Much stronger gains, especially in courses passed, would be required to improve students' long-term chances of completing their education.

21. Students who received PCEN reading instruction had gains on the Degrees of Reading Power (DRP) Test that were higher than expected for middle school students and higher than the gains for students who did not have PCEN reading.

22. Students who had PCEN mathematics remediation in combination with reading or writing, but *not* students who had mathematics remediation alone, gained more on the Mathematics Achievement Test (MAT) than students who did not have mathematics remediation.

23. Students who had PCEN and/or enrichment had better attendance and courses passed outcomes than students who had neither of these courses. However, regression analyses established that differences in the attendance of the various groups in September, before the remediation and enrichment programs were implemented in most of the schools, accounted for the variance in outcomes. The remediation and enrichment programs selected students who were more available in the early fall, and did not alter their attendance patterns, even though these students received more program services than other students did. There is no evidence that the PCEN or enrichment classes themselves had any effect on attendance or courses passed.

24. Early current year attendance added significantly and substantially to the prediction of later current year attendance and courses passed after controlling for prior year attendance or courses passed. The attendance of every group of students was highest in September (85.2% overall) and declined regularly, month by month until February, when it picked up some with the start of the new semester. Personal and home problems alone would not account for these systematic declines.

25. In a given month, direct services were given slightly more frequently to students with better attendance, while indirect

services (i. e., attendance outreach) went to students with low attendance. Student attendance in one month was highly correlated with attendance the following month; for program students overall, neither direct nor indirect services appeared to have any impact on this pattern.

26. There was no difference for students in the School-Alone model and those in the CBO model on attendance; both had an average attendance change of -3.4%. The average change in proportion of courses passed was +2.8% for schools in the School-Alone model, and -0.3% for schools in the CBO model. All of the difference is accounted for by students in the School-Alone model who received enrichment classes. In enrolling more students, the SA model particularly enrolled more students whose prior achievement, especially higher test scores, contributed to 1987-88 courses passed.

26. Outcomes differed by district. In the highest achieving district, all three schools provided enrichment classes for program students, and two of the three had very high parent involvement.

27. Individual schools had average attendance changes that ranged from -9% to +3% and average changes in courses passed that ranged from -11% to +28%.

28. The school with the highest outcome in courses passed also had the third highest attendance change. This school had also shown strong gains, relative to the other schools, in the second year of the program. The dropout prevention program in this school was characterized by several important features: all DPP students were block-programmed; the DPP fostered a strong career education program; teachers and DPP staff ate lunch together every day; program staff kept very close track of students' attendance throughout the school day; and the program involved large numbers of parents in dinners and health workshops.

29. Another school that had positive attendance and courses passed outcomes in year Three had steadily improved its ranking for both outcomes during the three years of the DPP. The Pupil Personnel Records from this school evidenced a problem solving approach to the implementation of program, particularly to increase attendance in a homework helper program.

30. A school which had the largest attendance gain of all 29 schools in both 1986-87 and 1987-88 had major changes in its DPP program between the two years but in each year created channels for positive attendance outreach to students. These included a strong incentives program, especially trips, in year Two and a strong PCEN mathematics program in which all DPP students were enrolled in Year Three. The school's average gain on the MAT was the highest for DPP students in any of the 29 schools.

31. Male and female students had virtually the same attendance rates but males passed substantially fewer of their courses than females. These results, together with a pattern of different issues being discussed for male and female students in PPC meetings, show strong differences in expectations and performances by students' sex.

32. Students who met the BOE criteria for limited English proficiency had an average attendance decline of -4.1% and an increase in courses passed of +8.1%. However, students identified by expanded LEP criteria (see above #13) had an average attendance loss of -5.3% and a loss in courses passed of -0.3%. It is likely that the difference in courses passed is attributable to the schools' provision of special language instruction services for officially eligible students.

Middle School Program Costs

33. Total costs for the middle school Dropout Prevention Program during 1987-88 were $4,692,801. When fringe benefit costs are excluded from the total (because they were not included in the 1986-87 analysis), total costs show an increase of 8.4% over 1986-87 expenditures.

34. Average district-level expenditures were $443,383 for districts in the School-Alone model, and $508,126 for districts in the CBO model. Per-pupil costs averaged $798 per pupil in the School-Alone model and $1,432 per pupil in the CBO model.

35. There was no relationship between program costs and performance outcomes.

Conclusions and Recommendations

36. CBOs adapted to school operating procedures to gain access to students in school, but in doing so they may not have been relating to students in the same way that they would in their own or a different setting. While two CBO schools achieved relatively high attendance gains, it cannot be said overall, qualitatively or quantitatively, that community-based agencies made either a positive or a negative contribution to dropout prevention efforts.

37. Although the program has attempted to provide alternative instruction through remediation and enrichment add-ons, it does not acknowledge the need for a comprehensive restructuring of students' school experiences, and therefore has not yet addressed the central curriculum issue.

38. The schools should strive to have fundamentally positive communications with students and their families. DPP staff in

each school should review their attendance outreach functions and parent participation activities and concentrate on those that seem to result in the most positive interactions. Teachers should look for opportunities for positive communications with students and their families.

39. Given that students' highest rate of attendance is in September and that attendance early in the year is highly predictive of attendance and courses passed later in the year, the schools must be ready to welcome students with an engaging program and supportive services from the beginning of the school year in September.

40. Schools should modify their instructional programs to accomodate students' perceptions of the instruction that they find most helpful to them for learning. Observations and interviews of students suggest that these practices include a combination of direct instruction and hands-on activity, with teachers taking time to explain things patiently to students.

41. The schools need to take much stronger measures to facilitate middle school students' orientation to high schools. High school orientation needs to be integrated more closely with students' planning for their futures, beginning early in the middle grades.

42. Schools need to assess the adequacy of their counseling and health resources, both to rationalize the best use of the resources they already have, directly or through referral, and to inform city and state authorities of the needs of students in the schools.

43. Schools need to decide what information about student performance and services to students will best aid them in reaching dropout prevention goals. The Board of Education should work with the schools to develop ways of obtaining and updating this information. Advisory and coordinating roles need to be expanded for teachers, and more tax-levy teachers need to be included on Pupil Personnel Committees.

44. Given that program budgets were much higher in schools using CBOs, while target populations were smaller and outcomes were not better for students in CBO schools, student enrollment and service delivery goals for schools collaborating with CBOs should be reviewed.

45. Central and borough or district Board of Education personnel should share expertise and decision-making power with local school personnel in all of these matters. Long- and short-range goals must be set within a framework of mutual respect and accountability.

ACKNOWLEDGMENTS

We are grateful for the assistance of many individuals in the preparation of this report. Selina Bendock managed the data files and did most of the computer analyses, and David Rindskopf of the CUNY Graduate Center assisted in the conceptualization of some of the analyses. The Office of Research, Evaluation, and Assessment (formerly the Office of Educational Assessment) of the New York City Board of Education provided us with computer tapes, and a number of individuals at the Board provided us with program expenditure information. We especially thank Dennis McCarthy and the staff of the Office of Student Progress at the Board of Education, who provided extensive documentation of the implementation of the program in the schools. Finally, we acknowledge the openness with which the school and community-based organization staff members, as well as the middle school students themselves, shared with us what they knew and felt about the Dropout Prevention Program; we hope that this report reflects their perspectives and concerns as well as our own.

TABLE OF CONTENTS

Chapter	Page
Chapter One: Introduction and Background.....	1
Chapter Two: Schools and Students Participating in the Middle School Dropout Prevention Program.....	11
Chapter Three: Implementation of the Middle School Dropout Prevention Program in 1987-88....	23
Chapter Four: Distribution of Services to DPP Students in 1987-88.....	48
Chapter Five: Program Outcomes for Middle School Students Participating in the Dropout Prevention Program, 1987-88.....	64
Chapter Six: Effects of Program Services on Outcomes.....	88
Chapter Seven: Middle School Program Expenditures for 1987-88.....	99
Chapter Eight: Summary and Recommendations.....	105

LIST OF TABLES

Table		Following Page
1-1	Middle Schools Participating in the Dropout Prevention Initiative, 1987-88	1
2-1	Characteristics of Middle Schools Participating in the 1987-88 Dropout Prevention Initiative	11
2-2	Students Participating in the Dropout Prevention Initiative, 1987-88	12
2-3	Date of Program Entry for Targeted Students	13
2-4	Background Characteristics of Program Students	15
2-5A	Prior Year Attendance for DPP Students in Different Grades, and by Whether They Had Been Promoted or Retained After 1986-87	17
2-5B	Prior Year Courses Passed for DPP Students in Different Grades, and by Whether They Had Been Promoted or Retained After 1986-87	17
2-6	Prior Year Attendance and Courses Passed for Program Students	18
2-7	Prior Year Attendance and Courses Passed for Program Students, by District	18
2-8	Background Characteristics of Students Enrolled in PCEN/Remedial Classes, Enrichment Classes, Both, or Neither	19
2-9	Fall 1987 Attendance for Students, by Whether They Were Clustered Together	20
2-10	Reasons for Program Enrollment	21
2-11	Students with Different Numbers of Risk Factors, by School	22

List of Tables, cont'd.

Table		Following Page
4-1	Total Program Services Recorded on MSSR Forms in 1987-88	49
4-2A	Average Number of DPP Services per Student for Seasons and Total 1987-88 School Year	51
4-2B	Seasonal Sub-Totals of Services Recorded on MSSR Forms, by School, 1987-88	52
4-3	Total Program Services Recorded on MSSR Forms, by Model and District	52
4-4	Proportions of Students Receiving Different Levels of Services	54
4-5	Proportions of Students Receiving Different Levels of Total Indirect and Direct Services	54
4-6	Average Total Direct and Indirect Services for Students in PCEN Remediation and/or DPP Enrichment Classes or Clustered	55
4-7	Per-Student Average Indirect and Direct Services by Season for Clustered and Not-Clustered Students	56
4-8	Total 1987-88 Indirect and Direct Services for Clustered and Not-Clustered Students in School-Alone and CBO Models	56
4-9	Average Total Indirect and Direct Services for Students at Different Levels of Risk	57
4-10	Proportions of Students at Different Levels of Risk Enrolled in PCEN Remediation and/or DPP Enrichment Classes	58
4-11	Issues Identified for Individual Male and Female Students in Pupil Personnel Committee Meeting Records	60
5-1	Average Schoolwide Attendance, by Grade Level	65
5-2	Attendance Outcomes for Program Students, by School	68

List of Tables, cont'd.

Table		Following Page
5-3	Attendance Outcomes for Program Students, by District	68
5-4	Students Who Improved Their Attendance	69
5-5	Courses Passed Outcomes for Program Students, by School	69
5-6	Courses Passed Outcomes for Program Students, by District	70
5-7	Proportion of Students With At Least One Prior Year Course Failure Who Passed More Courses in 1987-88	71
5-8	Students Passing Fewer, More, or the Same Proportion of Courses in 1987-88 Compared to 1986-87	71
5-9	Average Proportion of Courses Passed for Students Who Gained, Declined, or Remained the Same in Courses Passed	72
5-10	Change in Courses Passed for Students Who Did or Did Not Improve Attendance	72
5-11	Attendance and Courses Passed Outcomes, by Gender	73
5-12	Attendance and Courses Passed Outcomes for Students in Different Grade Levels	74
5-13	Attendance and Courses Passed Outcomes for Overage Students	74
5-14	Courses Passed for Students Overage for Grade	74
5-15	Outcomes for Students with Limited Proficiency in English	75
5-16	Changes in Attendance and Courses Passed for Limited-English Proficient Students, by Hispanic Surname	76
5-17	Attendance Outcomes for Students Meeting Different Program Eligibility Criteria	77

List of Tables, cont'd.

Table		Following Page
5-18	Courses Passed Outcomes for Students Meeting Different Program Eligibility Criteria	78
5-19	Attendance and Courses Passed Outcomes for Students with Multiple Risk Characteristics	79
5-20	Attendance Outcomes for Students in PCEN/Remedial or Enrichment Classes or Clustered Together	80
5-21	Courses Passed Outcomes for Students in PCEN/Remedial or Enrichment Classes or Clustered Together	80
5-22	Changes in Attendance and Courses Passed for Students in School-Alone and CBO Models, by Whether They Participated in PCEN or Enrichment Classes	81
5-23	Performance on Standardized Tests for Students Who Received PCEN Remediation	82
5-24	Coefficients for Regression Equation Predicting 1987-88 Attendance from School Attended After Controlling for Prior Year Attendance	83
5-25	Coefficients for Regression Equation Predicting 1987-88 Courses Passed from School Attended After Controlling for Prior Year Courses Passed	84
5-26	Attendance Outcomes for Comparison Group Students and for Program Students Meeting Attendance-Eligibility Criteria	85
6-1	Effects of Services on Attendance	88
6-2	Services to Students at Different Levels of Attendance in 1987-88	90
6-3	1987-88 Monthly Attendance for Students by Whether They Were Clustered Together	91
6-4	Effects of Services on Courses Passed	91

List of Tables, cont'd.

Table		Following Page
6-5	Year Three, Two, and One Beta Coefficient Rankings of Schools with the Greatest Attendance Gains or Losses in 1987-88	93
6-6	Year Three, Two, and One Beta Coefficient Rankings of Schools with the Greatest Gains or Losses in Courses Passed in 1987-88	94
7-1	Program Expenditures, by Budget Category	100
7-2	Total School and CBO Program Costs, by District	100
7-3	Total Program Expenditures and Average Per-Pupil Expenditures, by District	100
7-4	Total Program Expenditures by Budget Category and Per-Pupil Expenditures, by School	101
7-5	Rank Ordering of Schools by Per-Pupil Expenditures, Average Number of Indirect Services Per Student, and Average Number of Direct Services Per Student	101
7-6	School Rankings in Average Per-Pupil Expenditures and Adjusted Average Total Program Services Per Student	102
7-7	Results of Regression Analyses for the Cost-Effectiveness Analysis	102
7-8	School Rankings for Total Expenditures, Per-Pupil Expenditures, Attendance Outcomes, and Courses Passed Outcomes	103

Chapter One

INTRODUCTION AND BACKGROUND

The 1987-88 school year was the third full year of implementation of the New York City Dropout Prevention Initiative. This evaluation report focuses exclusively on the middle school programs that were part of the Initiative, and presents data on the characteristics of student participants, the implementation and delivery of program services, and outcomes for the Initiative's third year.

Program Background

The Dropout Prevention Initiative was established in 1985 by the New York City Board of Education, the City's Office of Management and Budget, and the Mayor's Office of Youth Services, with over $30 million in special city funding for the first three years of program operation. The Initiative has both a high school and a middle school component.

As in the previous two years, twenty-nine middle schools were involved in the Initiative during 1987-88, from ten local community schools districts (Table 1-1). These middle schools had all been part of the state-sponsored Attendance Improvement/Dropout Prevention (AIDP) Program[1] during the 1984-85 school year, and were selected for the Dropout Prevention Initiative because records indicated that large numbers of their students tended to be enrolled subsequently in the ten main high schools of the Initiative. The Initiative middle schools were managed through the Board's Office of Student Progress and were known as Dropout Prevention Program (DPP) middle schools. (This report will use the same nomenclature).[2]

---

1. The Attendance Improvement/Dropout Prevention Program was established by the New York State Legislature in 1984 to provide funds for special services for students at risk of dropping out. The program guidelines for the AIDP program at the middle school level were essentially the same as those described in this report on the city-funded DPI; the major programmatic difference between the two was that some DPI middle schools had intervention services provided by community-based organizations as well as by school personnel. During 1987-88, 69 middle schools were part of the AIDP program.

2. In 1987-88, in addition to the twenty-nine Dropout Prevention Program middle schools, the Dropout Prevention Initiative included the ten high schools in the Board of Education's High School Dropout Prevention Program and three additional high schools from the Attendance Improvement/Dropout Prevention Program, the latter for comparison purposes. Thus, the Dropout Prevention *Initiative* was slightly larger than the Dropout Prevention *Program*.

TABLE 1-1

Middle Schools Participating in the Dropout Prevention Initiative
Year Three, 1987-88

Community School District	School	Program Model*	Community-Based Organization
3 (Manhattan)	IS 44 JHS 54 JHS 118	CBO	Rheedlen Foundation
7 (Bronx)	IS 139 IS 162 IS 183	SA	--
9 (Brooklyn)	JHS 22 JHS 117 JHS 147	SA^	
10 (Bronx)	JHS 45 JHS 118 JHS 137	SA	--
14 (Brooklyn)	IS 49 JHS 50 JHS 318	SA	--
15 (Brooklyn)	IS 51 JHS 88 JHS 142	CBO	Good Shepherd Services
17 (Brooklyn)	IS 61 IS 320 IS 390	SA	--
19 (Brooklyn)	JHS 166 IS 292 IS 302	CBO	Colony-South Brooklyn Houses
27 (Queens)	IS 53 JHS 198	CBO	Federation Employment and Guidance Services (FEGS)
32 (Brooklyn)	JHS 111 JHS 291 JHS 296	SA	--

---

* CBO = CBO/School Model, employing personnel from both the Board of Education and a community-based organization
SA = School-Alone Model, employing Board of Education personnel only

^ District 9 schools were part of the CBO model until March 1987, when their CBO contract was cancelled

The Initiative was organized to provide intervention services for students deemed at risk of dropping out of school, and to test the effectiveness of several program models. At the middle school level, all schools participating in the program were expected to provide case management services and some instructional support to selected groups of at-risk students. As described in the Chancellor's Circular #37, 1986-7, which set out the guidelines for the Dropout Prevention Program for the 1987-88 school year, the following program components were to be implemented:

(1) Program Facilitation. This component was designed to ensure that the progress of the program as a whole, as well as that of individual students in the program, was being monitored. Each school would have a program facilitator; where a community-based organization is involved, there would also be a CBO site supervisor. The coordination of the different program elements, and the monitoring of their impact on individual students, was to be accomplished through a Pupil Personnel Committee, with members from the program staff and the larger school staff.

(2) Attendance Outreach. Student attendance was intended to be monitored regularly, and when problems arose families would be contacted through letters, phone contacts, and home visits. Incentives such as prizes, awards, or special activities would be provided to encourage attendance improvement.

(3) Guidance and Counseling. Group and individual guidance were to be provided to students, with the intent of addressing individual problems that might contribute to poor attendance.

(4) Health Services. Diagnostic screening, including physical, psychological, and educational assessment, as well as appropriate referral services where necessary, were intended to be targeted to at-risk students.

(5) School-Level Linkages. The goal of this component was to help middle school students make smooth transitions into high school. Activities would include visiting high schools and engaging in a variety of activities with high school students and/or staff.

(6) Alternative Educational Programs. High interest educational programs that supplement regular instructional services were to be provided to students. These might include peer-tutoring and other methods of individualized instruction, extra-curricular activities related to career training, recreational or cultural activities designed to encourage better attendance and improve achievement, or special classes.

One unique feature of the New York City Dropout Prevention Initiative has been the policy of involving community-based social service organizations (CBOs) in dropout prevention. Community-based agencies often have a well-established history of community service, providing youth and adult clients with a variety of services, including recreation, counseling, and job training or placement. They often work in a case management style, coordinating different services to address individual needs. Community-based organizations typically employ social workers and other staff who have training and skills that differ from those of school personnel, and their work organization and practices are also different from typical school practices. Thus, they are seen as potentially positive contributors to school-based dropout prevention efforts, by bringing in different skills and community linkages. At the middle school level in 1987-88, four community school districts each contracted with a different community-based organization to participate in the Dropout Prevention Program. (A fifth district had contracted with a CBO during the first two years of the program, but the contract was cancelled midway through the 1986-87 school year.) The CBOs established offices at the school sites and provided some of the required program components. (The CBOs are listed in Table 1-1.)

Eleven schools used a CBO as part of their Dropout Prevention Program during 1987-88. These schools are referred to as the CBO/School model (or CBO model, for short). The remaining eighteen schools, in six community school districts, used Board of Education personnel only (e.g., teachers, guidance counselors, and paraprofessionals) to work with program students. These schools are referred to as the School-Alone model (called the Project Connect model in previous reports). One important aspect of the evaluation of the Dropout Prevention Program has been to compare the effectiveness of these two service delivery models.

Most students who participated in the Dropout Prevention Program were selected on the basis of prior year attendance problems. Secondary eligibility criteria were also used to select students for the program; these included having failed two or more major subjects, having excessive latenesses, reading below grade level, and being overage for grade. In middle schools, students in the two highest grades of a school were eligible for the program. Students could be involved in the program for more than one year, although there generally was much mobility into and out of the program. In 1987-88, 4752 students participated in the middle school Dropout Prevention Program.

Program Evaluation

On April 1, 1986, the Institute for Urban and Minority Education at Teachers College, Columbia University, began a three-year evaluation of the Dropout Prevention Initiative, under a contract with the Board of Education. As stated in the Request

for Proposals for the evaluation contract, the evaluation of the Dropout Prevention Initiative was designed to measure program effectiveness in terms of five general objectives:

a) the effectiveness of the Initiative in improving attendance and reducing dropouts in the schools overall and for targeted students in particular;

b) the relative effectiveness of the different models of service delivery;

c) the relative effectiveness of schools within each model;

d) the appropriateness of specific services for different types of students; and

e) the relative cost effectiveness of each service delivery model.

Five evaluation reports have been published prior to the present volume.[3] These reports have provided qualitative analyses of the factors which affect program implementation and service delivery, and have described early outcomes of the program, particularly in terms of students' attendance, numbers of courses passed, standardized test scores, and persistence in school.

Regarding the middle school Dropout Prevention Program, these earlier evaluation reports showed that overall, the attendance of program participants continued to decline after program intervention and their course performance improved only very slightly. There were some school-to-school differences in the outcomes, but there was little difference in the results for schools in the CBO/School model versus schools in the School-Alone model. A more detailed summary of findings from the first two years is provided below.

Evaluation of the Program's Third Year

The intent of the third year evaluation of the middle school program was to assess the program's progress in meeting the objectives stated in the Chancellor's Circular (discussed in Chapter Five below), and to pay special attention to three other issues: the participation of Hispanic students in the program, the implications of working with different types of community-

---

3. They are Interim Report for Year One (July 25, 1986); Final Report for Year One (January 23, 1987); Interim Report for Year Two (September 14, 1987); Final Report on the Middle Schools for Year Two (March 22, 1988); and Final Report on the High Schools for Year Two (November 4, 1988). All are available from the Office of Educational Assessment at the New York City Board of Education.

based organizations, and the implementation of special alternative educational components in the schools.[4]

In order to address each of these issues, a combined quantitative-qualitative methodology was employed in the third year evaluation. Data collection activities included the following:

- interviews with program staff and students;
- observation of program activities;
- questionnaire surveys of staff and students;
- examination of program documents, including program monitoring reports from Board of Education offices; and
- review of statistical profiles of student characteristics, school characteristics, and achievement patterns in each of the middle schools, obtained from the central Board.

In addition, the evaluators obtained two types of statistical data from the Board of Education. The first was a monthly record of individual student attendance and receipt of program services, known as the MSSR (Monthly Summary of Service Report). The Board's Office of Student Progress developed the MSSR reporting format and supervised its use by school-based personnel. The second type of data came from the Board of Education's centralized student data base, and included information on individual students' background characteristics and academic achievement. All of these data were subjected to extensive review and analysis.

Following brief summaries of past findings, we turn to a discussion of the characteristics of the students and schools participating in the 1987-88 middle school Dropout Prevention Program.

Summary of Year One (1985-86) Findings

In the study of the Initiative's first year, the evaluation project found that the dropout prevention program components were implemented at different rates. Facilitation was implemented earliest in the year, followed by attendance outreach, guidance and counseling, health, alternative education, and school linkage. Programs involving community-based organizations experienced start-up problems due to delays in contract negotiations.

The effectiveness of program facilitation was partly dependent on the proactive support of the school principal. This was true especially where a community-based organization was

---

4. The analyses of Hispanic participation and community-based organizations will be included in the forthcoming longitudinal report on the Dropout Prevention Initiative. The discussion of alternative education is included in Chapter 4.

involved in the program.

Documented attendance services varied greatly from one school to another. Home visits were singled out as particularly valuable, but other tasks often competed with them for time. Obtaining daily attendance data from teachers was difficult in some schools.

In both Project Connect[5] and CBO schools, students' access to the services of a professional who was officially qualified to give guidance or counseling varied greatly.

School linkage was weakly implemented in most of the schools.

The type and level of alternative educational services provided in the DPP programs varied considerably. Some programs created appealing combinations of academic and recreational activities for after school, but many had problems recruiting teachers and attracting students after school.

A total of 4336 students were identified as middle school program participants. The attendance of targeted middle school students fell about 4% during the program period. Overall, targeted middle school students passed about 1.5% more of their courses during the program period than before.

Targeted students' access to services varied somewhat by risk level. In general, the students least likely to receive services were the ones most at risk.

Summary of Year Two (1986-87) Findings

By June, 1987, the implementation of the Dropout Prevention Initiative was found to have reached a stage of routine activity for most of the components in most of the middle schools -- "routine" meaning that activity occurred on a regular basis, procedures were set, and staff knew their roles, but also that few major changes were being considered. This was a substantial development beyond the Initiative's first year, when more activities were in start-up phases. At the same time, relatively few components were being scrutinized within schools for refinement or for larger, more general changes, except for those for which the Office of Student Progress initiated program-wide changes toward the end of the year.

Program facilitation occurred daily from the beginning of the school year in most middle schools. Under attendance

---

5. The schools which did not work with a community-based organization were referred to as Project Connect model schools in the Year One and Year Two reports; in this report they are called the School-Alone model.

outreach, a variety of strategies were utilized to interact with families and students concerning student absences. All middle school programs conducted home visits, generally on a daily or weekly basis. Several schools instituted "positive home visits." Twenty-two of the programs made phone calls to homes on a daily basis; this activity was more prevalent in the Project Connect than the CBO-based programs. Incentives (awards, trips, etc.) were used to encourage and reward student attendance with about equal frequency in the two middle school program models.

Nine of the fifteen Project Connect (PC) middle school programs provided individual guidance on a daily basis, as did thirteen of the fourteen CBO-based programs. Nine of the PC and all of the CBO programs provided group counseling services. (In some schools, the DPP staff did not include personnel who were licensed or certified for counseling, so that although some counseling may have taken place, it was not reported as such.) Nine middle schools offered some form of parent-oriented counseling, including individual counseling, parent workshops, and a job referral program for parents.

Health services were available to middle school DPI students in all but three CBO and five PC schools. Most health activities were not specifically sponsored by the Dropout Prevention Initiative; instead, special efforts were made to see that targeted students have access to existing health services. In general, middle schools with CBO-based programs tended to offer a wider range of health services.

School-level linkages between middle schools and high schools were available to students in most middle school programs. Eleven CBO schools and all fifteen PC schools had tours or orientation sessions at high schools. Several schools reported as many as six different linkage activities, but sixteen schools reported only one activity under this component.

Career education was by far the most prevalent alternative educational program in the middle school programs, offered by twelve of fifteen PC schools and eight of fourteen CBO schools. Ten PC schools provided an enterprise program (typically a "mini-business" where students made candy, buttons, or the like to sell), while only three CBO schools did so. On the other hand, ten CBO schools reported recreational activities for students, while fewer PC schools did so.

The quality and extent of middle school program implementation appeared to depend on several key factors. One was the timing of budget approval and the availability of resources, a problem in a third or more of the middle schools. In several cases, for example, money for trips, awards, or other non-payroll purposes had to come out of a staff member's own pocket or another school fund until program funds were released for use. A second factor was the availability of staff. In several schools, Board of Education guidance counselors were not hired until mid-year, restricting programs' ability to provide

services to students. There were similar problems with CBO staffing as well.

School-CBO relations was another factor affecting program implementation. In five of the fourteen schools in the CBO model, relations between the two were reported to have worsened in the second year of the Initiative, and in two more schools, poor relations in the first year continued through the second year (three schools eventually cancelled their contract with a CBO). Personnel changes in both schools and CBOs sometimes strained relations between the two organizations and prevented the collaboration from moving forward. A school's willingness or reluctance to incorporate a CBO into its program was expressed in many ways, ranging from providing space to referring students to restricting the kinds of contact a CBO could initiate with students.

Staff quality was an important variable in the constellation of factors determining program implementation. At all levels of staffing, from family assistants to program supervisors, the skills and commitment of individuals involved had an impact. Unfortunately, the level of training and staff development provided to program personnel at the middle school level was low at many sites, and there were few opportunities for staff to meet together to share skills and expertise. Additionally, many program staff, particularly facilitators, reported not having enough time to perform their job responsibilities.

Finally, a school's overall commitment to the Dropout Prevention Initiative affected its ability to implement a program. In general, middle school personnel expressed more reservations about their dropout prevention programs than high school personnel did, questioning in particular the career education component and the involvement of CBOs. These attitudes may have been partly the result of middle schools' lack of participation in the initial adoption of the Initiative at the local level. The support of the school principal was an important aspect of school commitment, and in only twelve of the twenty-nine middle schools were principals characterized as highly supportive of their programs.

The most services to students recorded on Monthly Summary of Service Reports (MSSRs) were in the areas of mail and phone communications and individual guidance sessions or school-student conferences. In a (relatively) high middle range were extended day services and group guidance, while home visits and parent conferences or guidance were in a low middle range. The fewest services reported were high-school linkage activity and contact with health personnel, though an OEA services check-off reported most students receiving some service in these areas. Career education and incentive awards were found in most of the schools. Guidance and counseling was reported for more students in the CBO model schools and career education for more students in the PC schools. In most of the areas of service, there were substantial differences from one school to another in the frequencies of

services reported.

A total of 3922 students participated in the middle school Dropout Prevention Program during 1986-87. Almost half (48.9%) of the targeted students were in the eighth grade, 32.8% were in the seventh grade, and 18.3% were in the ninth grade. The modal age of the students was 14. All 3922 students were reported by DPP staff to have met one or another of the program's eligibility criteria. The average prior year (1985-86) attendance for students was 78%. Almost half (46.4%) of the students had failed 2 or more major subjects in the prior year, and 40.5% were reading below grade level. There were very large differences between schools in the targeted students' levels of risk on various dimensions.

In the middle schools overall, the Dropout Prevention Program as implemented in 1986-87 failed to improve students' chances of completing high school appreciably. For the students for whom data in both the prior year and 1986-87 were available, the average attendance of program participants declined 1.6% (or 2.9 days) from prior year levels, and students passed on average 4.2% more courses (i. e., about one-fifth of a course more) than they had the year before. For a control group of 790 students in the same middle schools (whose prior year attendance made them eligible for services but who were not enrolled in the DPP or a similar program), there was an attendance loss of 2.4% between 1985-86 and 1986-87, a change that was very similar to the change for DPP targeted students.

A regression analysis found that prior year attendance accounted for 31.8% of the variance in 1986-87 attendance, while the particular school in which a student was enrolled had a much smaller relation to the outcome measure, explaining 2.8% of the variance in 1986-87 attendance when prior attendance was controlled. A similar analysis found that the proportion of subjects passed in 1985-86 explained 11.5% of variation in subjects passed in 1986-87, while schools accounted for an additional 5.9% of the variance. This indicates a substantial influence of a student's being in one school versus another on courses passed.

Regression analyses of both outcome measures found relatively small effects for districts and virtually no effect for models. In other words, being in the CBO program model versus the Project Connect program model had no effect on students' attendance or courses passed.

Services reported on the MSSRs explained 12.3% of the variance of attendance and 9.2% of the variance of courses passed, after controlling for previous attendance or courses passed. However, attendance outreach and health services were associated with declines in attendance or courses passed, while extended day and counseling services were associated with gains in these outcomes. These findings seem to reflect the distribution of these services to students who were absent or

present, rather than the success of the services in changing outcomes. A further analysis supported this conclusion, but found that group guidance did contribute significantly to improved student attendance and courses passed.

Although there was not a substantial change for the schools overall in the attendance or courses passed of DPP targeted students, there were large differences in outcomes between the schools that gained the most and the schools that lost the most, especially in courses passed. A comparison of the exceptional gain and loss schools found that they were not systematically different on most indices of school organization, for example size of the total school register. Targeted students in the loss schools started the year somewhat more at risk than those in the gain schools, but when regression analyses controlled on one or another of the risk variables, the same schools emerged as the strongest gain or loss schools. The gain schools did tend to have recorded more services that involved direct contact with students than did the loss schools, though record keeping itself was not necessarily a priority with these schools. Hands-on or experiential business enterprise, career-education video, and/or field trip activities were found in virtually all of the gain schools. A qualitative analysis found that the gain schools took initiatives and used their resources creatively to solve budget and staffing problems and to gain access to students. Dropout prevention tended to have stronger support from the school administration in the gain schools than in the loss schools. The DPP staff of the schools that gained appeared to be driven more by the goals of the program than by a need to conform to external expectations.

Chapter Two

SCHOOLS AND STUDENTS PARTICIPATING IN THE MIDDLE SCHOOL DROPOUT PREVENTION PROGRAM

Schools in the DPP

Twenty-nine middle schools, from ten community school districts, were part of the Dropout Prevention Program during 1987-88. All 29 schools had been part of the program since its inception in 1985-86, and all had participated in the Attendance Improvement/Dropout Prevention Program before that.

Table 2-1 shows some demographic and achievement characteristics of these schools. It is immediately apparent that these are schools with a host of risk indicators. For example, in both 1986-87 and 1987-88, twenty-four of the schools fell below the average attendance rate of 85% for the city's middle schools during 1986-87. All but three of the schools ranked in the bottom half of the city's middle schools in terms of the proportion of students reading at or above grade level during 1986-87. (The proportion of students meeting this criterion ranged from just 26% in School 29 to 70% in School 27.) In addition, in 1987-88, only two of the sixteen schools with a ninth grade met the Chancellor's performance standard of having at least 70% of all ninth graders pass a Regents or RCT math test (data not tabled). Only five of the schools were reported to have student/guidance counselor ratios of lower than 300 to 1, one indicator of the level of resources available to students and their families. All of the schools reported that over half of their students were eligible for free or reduced lunch programs. Only five of the twenty-nine schools had fewer than 90% of their students who were black or Hispanic; these students typically have been exposed to less than ideal educational conditions in the past.

These indicators are static, one-time figures, and do not convey anything about school improvement processes taking place at any of the Dropout Prevention Program middle schools. Nevertheless, they draw attention to some important characteristics of the educational environment in which program students find themselves. In Chapter Six, we will explore whether the patterns of gain or loss in student attendance and achievement within the Dropout Prevention Program itself are associated with any school-level factors.

Students in the DPP

A monthly record, called the Monthly Summary of Services Report (MSSR), was kept for each student participating in the

TABLE 2-1

Characteristics of Middle Schools
Participating in the 1987-88 Dropout Prevention Initiative

School	1987-88 Total Register	- Average Daily - Attendance 1986-87	1987-88	% Students reading at or above grade level (May 1987)	City rank in reading scores (of 178)	Student/ guidance counselor ratio 1987-88	% Students eligible for lunch programs 1987-88	% Hispanic 1987-88	% Black 1987-88	Total % Black or Hispanic 1987-88	% Students Limited-English Proficient 1987-88
School-Alone Model											
14	588	84%	82%	46%	146	588:1	62%	52%	48%	100%	10%
15	661	80%	82%	30%	175	331:1	87%	69%	31%	100%	17%
17	1385	83%	79%	44%	135	462:1	92%	65%	30%	95%	12%
18	1424	81%	82%	49%	137	475:1	60%	6%	94%	100%	3%
20	872	80%	79%	48%	140	291:1	68%	47%	53%	100%	16%
21	791	89%	90%	52%	123	791:1	95%	72%	24%	96%	9%
24	1378	80%	77%	37%	168	1378:1	55%	48%	49%	97%	13%
25	1252	83%	82%	54%	113	1252:1	66%	55%	41%	96%	11%
28	831	79%	82%	29%	176	416:1	90%	80%	19%	99%	16%
29	1202	84%	83%	26%	177	401:1	62%	89%	9%	98%	29%
31	1730	87%	85%	53%	119	1730:1	77%	6%	92%	98%	12%
33	1277	77%	78%	49%	136	425:1	100%	64%	19%	83%	17%
34	764	84%	87%	38%	166	382:1	71%	70%	29%	99%	12%
35	854	82%	84%	54%	112	854:1	78%	64%	31%	95%	13%
36	1808	85%	83%	51%	128	903:1	74%	10%	87%	97%	10%
38	1076	80%	78%	38%	167	269:1	100%	74%	25%	99%	20%
39	755	80%	81%	30%	173	(none)	100%	95%	3%	98%	13%
41	1098	82%	83%	43%	158	1098:1	62%	69%	25%	94%	22%
CBO/School Model											
16	969	87%	88%	61%	88	242:1	80%	42%	37%	79%	4%
19	1375	84%	83%	52%	121	458:1	78%	70%	26%	96%	13%
22	854	87%	86%	66%	73	285:1	65%	39%	27%	66%	4%
23	836	79%	82%	49%	134	167:1	59%	15%	84%	99%	3%
26	1513	83%	84%	64%	115	378:1	58%	25%	66%	91%	8%
27	1105	88%	88%	70%	62	368:1	64%	50%	18%	68%	7%
30	1092	82%	80%	53%	118	364:1	71%	27%	73%	100%	6%
32	1003	81%	81%	46%	142	1003:1	55%	50%	45%	95%	13%
37	873	82%	81%	51%	126	291:1	84%	41%	58%	99%	9%
40	970	83%	81%	56%	106	323:1	66%	61%	19%	80%	10%
42	843	82%	80%	46%	148	422:1	61%	34%	63%	97%	16%

middle school Dropout Prevention Program during 1987-88. On an individual student's MSSR for each month, program staff recorded whether the student was admitted to or discharged from the program in that month, the student's attendance for the month, and the days on which the student received any of sixteen separate program services. On the last MSSR form in June, staff recorded the number of courses passed and failed by the student, whether the student was promoted to the next grade, and whether the student had participated in several ongoing group activities, including remediation, enrichment, and extended day programs.

A total of 4845 students had at least one MSSR form completed for them during 1987-88. Of these students, 93 were discharged from the program or the school during either the same month that they were admitted to the program or the following month. With less than two full months in the program, these students were not considered to be program participants and were excluded from further analyses. The total number of program students was thereby reduced to 4752.

An additional 99 students were listed on the MSSR forms as participating for longer than two months, but no program services at all were recorded for these students. These students were retained in the analysis.

Number of students in each school. Table 2-2 shows the number of program students enrolled in the Dropout Prevention Program in each of the 29 middle schools, by grade level. Of the 4752 students in the program, 3333 were part of the School-Alone program model and 1419 were in the CBO/School model.

Table 2-2 also shows the students in the Dropout Prevention Program as a percentage of all students on the school register. In two schools, the Dropout Prevention Program enrolled over a quarter of all the students on register. The more usual arrangement, however, was that a smaller proportion of a school's students were enrolled in the program; the average proportion of a school's students enrolled in DPP was 18.6% for the School-Alone model, 12.6% for the CBO model, and 16.3% for the 29 schools overall.

The program guidelines for 1987-88 (Chancellor's Circular #37) stated that each middle school program was expected to serve at least 150 students (School 26 was expected to serve 200 students and received additional funding to do so). All eighteen schools in the School-Alone model exceeded this requirement; sixteen of them enrolled more than 160 students in the program. Seven of the eleven schools in the CBO model did not reach the target number of 150; School 26 was the only school in the CBO model to exceed its target number.

One reason for the large numbers of program students in some

TABLE 2-2

Students Participating in the Dropout Prevention Initiative
Middle Schools, 1987-88

School	Total DPP	Grade 6	Grade 7	Grade 8	Grade 9	Spec. Ed.	% of School Register	Total School Register
OVERALL	4752	205	1287	1826	668	528	16.3%	
School-Alone Model	3333	196	950	1236	385	395	18.6%	
14	215	47	79	42	--	39	36.6%	588
15	196	20	69	71	--	25	29.7%	661
17	140	2	48	75	--	6	10.1%	1385
18	186	18	40	101	1	16	13.1%	1424
20	188	--	14	71	76	25	21.6%	872
21	167	32	49	54	--	24	21.1%	791
24	173	39	56	49	--	19	12.6%	1378
25	181	6	64	73	--	28	14.5%	1252
28	174	--	75	67	4	21	20.9%	831
29	177	12	66	67	--	24	14.7%	1202
31	215	8	57	113	--	26	12.4%	1730
33	186	--	--	60	103	17	14.6%	1277
34	156	4	67	51	--	22	20.4%	764
35	181	--	8	58	82	23	21.2%	854
36	241	4	111	85	--	26	13.3%	1806
38	174	--	76	75	--	16	16.2%	1076
39	175	--	20	64	76	7	23.2%	755
41	208	4	51	60	43	31	18.9%	1098
CBO/School Model	1419	9	337	590	283	133	12.6%	
16	104	8	19	54	10	4	10.7%	969
19	108	--	37	68	--	--	7.9%	1375
22	128	--	35	50	21	19	15.0%	854
23	129	--	10	36	46	25	15.4%	836
26	241	1	96	110	--	23	15.9%	1513
27	110	--	12	44	47	3	10.0%	1105
30	109	--	1	41	64	1	10.0%	1092
32	119	--	31	37	24	27	11.9%	1003
37	142	--	53	63	--	18	16.3%	873
40	120	--	29	39	41	5	12.4%	970
42	109	--	14	48	30	8	12.9%	843

schools appears to be related to changes in program guidelines regarding the alternative education component. Chancellor's Circular #37 was given to the schools in late spring, 1987, and schools began selecting students and planning programs, including state-funded alternative educational programs, based on the guidelines in that circular. However, over the summer it was determined that state funds could be used only to provide remediation programs, and only to students who qualified on the basis of standardized test scores. (These developments will be described more fully in Chapter Three.) This created a great deal of confusion in the schools in the fall, and resulted in programs having to find new groups of students who were eligible for the remediation component of the program. Some schools chose to keep on their program roster students whom they had already begun to work with, regardless of whether they were eligible for remediation, and to enroll additional students for the remediation program. Although all schools had to adjust their program enrollment in light of the new guidelines, it appears that only in the schools in the School-Alone model did this development result in target populations that were much larger than the required 150. It is probably not coincidental that only in School-Alone schools were there students listed as receiving "enrichment" programs through the alternative education program component. These were, by and large, students who did not qualify for state-funded remediation programs, but who participated in some form of alternative education.

Date of Program Enrollment and Length of Time in Program

Seventy-six percent (or 3614) of the program students were enrolled in the program during September, 1987. An additional 14% were enrolled during October or November, and the remaining 10% were enrolled sometime between December and April. Table 2-3 shows the proportion of students in each school who were enrolled in the program at these different times. Three schools enrolled over ninety percent of their target population in September (Schools 23, 27, and 30); one school (School 21) enrolled fewer than half of its target population during the first month of the school year.

Ninety percent (or 4259) of the program students remained in the program through June, 1988. Because not all students had been enrolled right away in September, a smaller proportion were in the program for the entire school year. Sixty-eight percent of the program students were in the program for the full nine months; 15% participated for seven to eight months; 13% participated for four to six months, and 5% were in the program only one or two months.

TABLE 2-3

Date of Program Entry for Targeted Students DPP Middle Schools, 1987-88

School	Sept N	Sept %	Oct-Nov N	Oct-Nov %	Dec-Jan N	Dec-Jan %	Feb-Mar N	Feb-Mar %	Apr-May N	Apr-May %
OVERALL	3604	76%	674	14%	157	3%	290	6%	27	1%
School-Alone Model										
14	140	65%	19	9%	2	1%	54	25%	0	--
15	154	79%	27	14%	2	1%	13	7%	0	--
17	115	82%	15	11%	2	1%	8	6%	0	--
18	150	81%	0	--	19	10%	17	9%	0	--
20	140	75%	47	25%	1	1%	0	--	0	--
21	72	43%	78	47%	0	--	17	10%	0	--
24	128	74%	38	22%	5	3%	2	1%	0	--
25	153	85%	25	14%	3	2%	0	--	0	--
28	151	87%	8	5%	0	--	15	9%	0	--
29	146	83%	5	3%	23	13%	3	2%	0	--
31	124	58%	31	14%	9	4%	51	24%	0	--
33	165	89%	4	2%	17	9%	0	--	0	--
34	119	76%	35	22%	2	1%	0	--	0	--
35	119	66%	36	20%	12	7%	14	8%	0	--
36	144	60%	62	26%	8	3%	27	11%	0	--
38	131	75%	41	24%	1	1%	1	1%	0	--
39	123	70%	52	30%	--	--	--	--	0	--
CBO-School Model										
16	79	76%	2	2%	3	3%	--	--	20	19%
22	114	89%	9	7%	2	2%	3	2%	0	--
23	118	92%	7	5%	3	2%	--	--	1	1%
26	194	81%	36	15%	1	--	10	4%	0	--
27	101	92%	8	7%	1	1%	--	--	0	--
30	99	91%	2	2%	7	6%	1	1%	0	--
32	98	82%	5	4%	2	2%	8	7%	6	5%
37	122	86%	62	26%	8	3%	27	11%	0	--
40	89	74%	18	15%	4	3%	9	8%	0	--
42	78	72%	20	18%	3	3%	8	7%	0	--

Missing Data

Before we turn to an examination of student characteristics, it is important to consider the completeness of data that are available for analysis. Information on descriptive characteristics such as age and sex was available for nearly all students. We estimated the English-language proficiency of students using a variety of data sources, including their scores on a language assessment battery and the language in which they were administered a variety of standardized achievement tests. These data sets were more complete than in previous years of the program evaluation; using them, we arrived at numbers of students in several categories of language proficiency that seem consistent with determinations from other sources.

Grade level information for the 1986-87 school year was missing for two percent of the students; grade codes for 1987-88 were missing for five percent of the students. For 18% of the students, we could not ascertain whether they had been promoted or retained from 1986-87 to 1987-88; in part, this was due to the fact that special education students keep the same grade code from one year to the next.

Missing attendance data. Of the 4752 middle school students participating in the 1987-88 Dropout Prevention Program, 4138 (87%) had information on attendance for both 1986-87 and 1987-88 school years.[1] Only 17 students were missing attendance data for both years of the program. Of those missing attendance data for one of the two years, 495 were missing 1986-87 data and 102 were missing 1987-88 data. Thus, the greatest problems with missing data occurred with students who did not have prior year attendance figures.

Missing course data. Of the 4752 program students, 3574, or 78%, had data on courses passed for both 1986-87 and 1987-88. Nearly three hundred students (294, or 6%) had no data on courses passed in 1986-87, and 798 (17%) were missing course data for 1987-88.

---

1. In calculating average proportion of days present for both 1986-87 and 1987-88, if there was information on only one semester in a given year, that figure was used as the full-year figure. Since student attendance is generally lower in the spring than in the fall, there is some inaccuracy introduced by this substitution.

Student Characteristics

Table 2-4 presents general descriptive data on the program participants. Slightly more of the students were male than female: 2502 (53%) were male and 2250 (47%) were female. The ratio of males to females was virtually identical in both the School-Alone and CBO models. The proportion of males in a given school's program ranged from 46% in School 29 to 61% in School 23; in twenty-one schools, males made up more than half of the program population.

Age and being overage for grade. Ninety-five percent of the students were between the ages of twelve and fifteen, an appropriate age range for middle school students. However, an additional 161 students, representing 3.4% of the program population, were sixteen or seventeen years old. And almost half (48%) of the program students were overage for their grade. Thirty-one percent were one year overage, fourteen percent were two years overage, and three percent were three or four years overage for grade. A slightly larger proportion of females than males was one year overage for grade (33% vs. 30%), but at each category of overage, more of the students were male.

Some schools had fewer overage students in their Dropout Prevention Programs than others. In Schools 24 and 26, 65% of the program students were not overage, while in School 39, only 39% of the program students were not overage. Across all schools, 65% of the seventh graders were overage for grade, as were 58% of the eighth graders and 56% of the ninth graders.

Being overage for grade level is obviously directly connected to success in passing from one grade to the next. Thirteen percent of the program students had not passed from one grade to the next coming into the 1987-88 school year. Most of those held back were seventh graders. Twenty-five percent of the seventh graders in the program during 1987-88 had been held back the previous spring, compared to seven percent of eighth graders and five percent of ninth graders.

English-language proficiency. Only eight percent of the 4752 program students were listed on Board of Education files as being limited-English proficient (LEP), using the Board's criterion of scoring at or below the twentieth percentile on the Language Assessment Battery in 1986 or 1987. Some language experts and minority advocates, however, believe this to be too generous a determination of English language proficiency, and suggest that students scoring below the fortieth percentile should be considered limited-English proficient. An additional three percent of the program students met this criterion. Moreover, eleven percent of the program students did not fall into the above categories but did take at least one of the Board-administered standardized achievement tests during 1986-87 or

TABLE 2-4

Background Characteristics of Program Students
DPP Middle Schools, 1987-88

Category		N	% of Total Roster
Sex	Male	2502	53%
	Female	2250	47%
Grade	6th	205	4%
	7th	1287	27%
	8th	1826	38%
	9th	668	14%
	Spec. Ed.	528	11%
	Missing	238	5%
Age	<12 yrs	87	2%
	12 yrs	595	13%
	13 yrs	1439	30%
	14 yrs	1617	34%
	15 yrs	852	18%
	16 yrs	147	3%
	17 yrs	14	1%
Overage for grade	Not overage	2472	52%
	1 yr overage	1494	31%
	2 yrs overage	665	14%
	>2 yrs overage	120	3%
LEP-status	Scored 20% or below on LAB	380	8%
	Scored 21%-39% on LAB	143	3%
	Took alternate language test version	539	11%
	Total	1062	22%

1987-88 in an alternate language version, suggesting that they, too, had limited English language skills.

In all, 1,062 (22%) of the program students had at least one indicator of limited proficiency in English. The same proportion of males and females were found to be limited-English proficient on both cutoff points for the LAB (<20th %ile and <40th %ile), but a greater proportion of males took a standardized test in an alternate language (16% of males vs. 7% of females). Not surprisingly, given neighborhood demographics, several community school districts -- notably District 7 and District 32 -- had relatively higher proportions of students with some indicator of limited English proficiency.

Prior year attendance and courses passed. The average prior year (1986-87) attendance for middle school program participants was 77%. This represents about 42 days of absence during the school year, or just over one absence a week.

A typical school day for middle school students consists of classes during seven, eight, or nine class periods. Major courses include subjects such as English, mathematics, science, social studies, and foreign language; students may also take shop courses, physical education, remedial or compensatory education classes, and other classes that are not considered major courses. The average proportion of prior year (1986-87) major courses passed by program students was 70%. On the basis of an academic program of five major courses, this would represent passing three and a half courses per year.

Differences in Prior Year Performance for Students with Different Background Characteristics

We have already seen that program students vary in terms of their gender, whether they are overage for grade, whether they were promoted or retained the previous year, and whether they have limited English proficiency. These characteristics can also be used to discern patterns of student attendance and academic performance during the year prior to program participation.

Gender. Males and females had virtually the same prior year attendance, 77%. However, in 1986-87, female students passed an average of 73% of their courses, while males passed only 67%. This difference is not attributable to differences in reading or math ability (thought to be related to academic performance), since males and females had comparable scores on both types of standardized tests in 1986-87. Nor, as we have just noted, could it be due to radically different school attendance patterns. Male middle school students may be receiving different course grades because they cut class more often, they follow course requirements and rules differently, they behave differently, or,

not least, because more active and assertive behaviors are interpreted as disruptive and challenging by school staff.

Retained in the same grade level for two years. There was little overall difference in prior year attendance for students in successive grades. Program students in the seventh grade had an average attendance rate of 78% in 1986-87; the rate for eighth graders was also 78%, and was 79% for ninth graders. Prior year attendance for special education students was lower, at 74%. However, when students are divided into those repeating a grade level or entering it for the first time, some differentiation appears (Table 2-5a). The most striking differences occur with eighth and ninth graders. In those grades, the "repeaters" had prior year attendance that was six to eight percentage points lower than the rate for students new to the grade level. When it comes time to examine the attendance change scores for students in each grade level, it will be important to consider how the repeaters did relative to other students.

There was more variation in course performance across grade levels than was evident for attendance. Program seventh graders had passed only 65% of their courses the prior year, while eighth graders had passed 73% and ninth graders had passed 74%. Special education students had passed 68% of their courses during 1986-87. (See Table 2-5b.) Predictably, students who were repeating a garde level had passed a much lower proportion of their courses the prior year than students who successfully passed into the next higher grade. For example, new eighth graders had passed 76% of their courses the prior year, compared to only 37% for students repeating the eighth grade. As with attendance, the change scores for courses passed will likely be much different for repeater and new students.

Overage for grade. The prior year attendance of students was negatively related to how many years overage for grade they were. Program students who were not overage had average attendance in 1986-87 of 78%. Students who were one year overage had prior year attendance of 78% as well, while the prior year attendance of students two years overage for grade fell to 75%, and the rate for students three years overage fell further to 73%. The pattern was even more dramatic in the proportion of courses passed in 1986-87. Students who were not overage for grade had passed an average of 74% of their courses the previous year. Comparable rates were 68% for students one year overage, 63% for students two years overage, and 51% for students three years overage. These findings are consistent with those noted above, that students retained in a grade level have lower prior year attendance and courses passed rates than students who were not held back. In essence, it appears that being held back several times and becoming increasingly more overage compounds problems for students.

TABLE 2-5a

Prior Year Attendance for DPP Students in Different Grades, and by Whether They Had Been Promoted or Retained After 1986-87 DPP Middle Schools, 1987-88

1987-88 Grade Level	Average 1986-87 Attendance: All Students (N)	Students New to Grade Level in 1987-88 (N)	Students Repeating Grade Level in 1987-88 (N)
OVERALL	78.2% (3514)	79.0% (3007)	73.5% (507)
Grade 6	70.1% (41)	73.7% (8)	69.2% (33)
Grade 7	77.8% (1036)	79.0% (722)	75.1% (314)
Grade 8	78.3% (1782)	78.9% (1642)	70.9% (130)
Grade 9	79.0% (655)	79.3% (625)	72.5% (30)

TABLE 2-5b

Prior Year Courses Passed for DPP Students in Different Grades, and by Whether They Had Been Promoted or Retained After 1986-87 DPP Middle Schools, 1987-88

1987-88 Grade Level	Average 1986-87 Courses Passed: All Students (N)	Students New to Grade Level (N)	Students Repeating Grade Level (N)
OVERALL	70.3% (3661)	73.7% (3189)	47.1% (472)
Grade 6	68.1% (195)	71.8% (160)	51.2% (35)
Grade 7	65.4% (1206)	69.9% (913)	51.2% (293)
Grade 8	72.8% (1658)	75.7% (1537)	36.8% (121)
Grade 9	73.9% (602)	75.1% (579)	42.1% (23)

Limited-English proficiency. The students who met the Board of Education's official criterion for limited-English proficiency (and thus who most likely had access to special bilingual services) had prior year attendance of 76%, very close to the rate of 77% for all other students. However, they passed fewer courses: 64% compared to 70% for all other students. When students who met one of the other two indicators of limited language ability (LAB score below 39th percentile, or having taken a standardized test in an alternate language format) are grouped together, these students had an average prior year attendance of 74%, compared to 78% for all other students. These same students passed 68% of their prior year courses, compared to 70% for all other students.

School and district differences. Table 2-6 shows the average prior year attendance rates and proportion of courses passed for program students in the various middle schools; Table 2-7 gives the same information broken down by community school district. The range in prior year attendance went from 74% in School 40 to 81% in School 16. The range in average proportion of prior year courses passed was considerably larger, from 50% in School 32 to 83% in School 26. At the district level, the spread in average prior year attendance was again smaller than the spread in average prior year courses passed.

Characteristics of Students Participating in Special Components

As will be discussed at greater length in Chapter Three, an important feature of the 1987-88 Dropout Prevention Program was the provision of remedial education classes as part of the alternative education component. These reading, writing, and mathematics classes were funded with state PCEN (Pupils with Compensatory Education Needs) monies, and carried strict eligibility requirements, i.e., scores below the fiftieth percentile on standardized achievement tests. All but two schools enrolled at least some of their DPP students in PCEN classes.

Other students were enrolled in enrichment classes, which included study in major school subjects (primarily math and reading), as well as computer courses and career education. Often, these students participated in PCEN courses, but were not strictly eligible for them because their test scores were too high or were unavailable.

Students enrolled in PCEN and/or enrichment classes experienced the Dropout Prevention Program differently than other students did, not only because of the instructional content they were exposed to in these classes, but also because they were grouped together for a portion of the school day. As we will

TABLE 2-6

Prior Year Attendance and Courses Passed for Program Students DPP Middle Schools, 1987-88

School	Roster	Average 1986-87 Attendance (N)		Average 1986-87 Courses Passed (N)	
OVERALL	4752	77.4%	(4240)	69.8%	(4372)
School-Alone Model	3333	77.7%	(2941)	70.1%	(3039)
14	215	79.7%	(144)	74.3%	(200)
15	196	79.4%	(133)	59.4%	(183)
17	140	75.8%	(118)	69.7%	(102)
18	186	74.9%	(163)	56.3%	(168)
20	188	78.1%	(187)	74.4%	(176)
21	167	80.1%	(130)	72.5%	(156)
24	173	71.7%	(120)	69.1%	(170)
25	181	77.4%	(175)	66.1%	(158)
28	174	78.7%	(142)	76.1%	(163)
29	169	76.9%	(166)	59.6%	(150)
31	215	78.1%	(209)	75.7%	(189)
33	186	78.3%	(185)	73.2%	(163)
34	156	77.2%	(114)	67.5%	(149)
35	181	79.7%	(180)	77.8%	(157)
36	241	79.3%	(226)	71.7%	(227)
38	174	77.1%	(174)	77.0%	(163)
39	175	78.2%	(175)	70.7%	(165)
41	208	76.8%	(200)	68.5%	(200)
CBO/School Model	1419	76.6%	(1299)	69.2%	(1333)
16	104	80.7%	(209)	62.7%	(100)
19	108	74.9%	(106)	59.7%	(98)
22	128	75.3%	(128)	73.0%	(123)
23	129	73.6%	(125)	80.4%	(106)
26	230	78.2%	(233)	82.8%	(236)
27	110	79.0%	(107)	65.8%	(102)
30	109	76.6%	(108)	67.3%	(104)
32	119	76.8%	(119)	50.4%	(113)
37	142	75.0%	(139)	62.0%	(133)
40	120	73.9%	(119)	69.2%	(115)
42	109	78.1%	(106)	72.9%	(103)

TABLE 2-7

Prior Year Attendance and Courses Passed
for Program Students, by District
DPP Middle Schools, 1987-88

School	N	Avg. 1986-87 Attendance (N)	Avg. 1986-87 Courses Passed (N)
OVERALL	4752	77.4% (4240)	69.8% (4372)
School-Alone Model	3333	77.7% (2941)	70.1% (3039)
District 7	567	78.9% (391)	67.3% (532)
District 9	562	75.8% (495)	68.0% (528)
District 10	507	78.2% (483)	74.1% (422)
District 14	516	78.9% (447)	73.1% (484)
District 17	642	77.7% (598)	68.6% (584)
District 32	539	77.4% (527)	70.7% (489)
CBO/School Model	1419	76.6% (1299)	69.2% (1333)
District 3	332	78.5% (288)	61.6% (316)
District 15	358	76.0% (353)	69.5% (340)
District 19	359	75.6% (292)	63.0% (335)
District 27	370	76.6% (366)	82.1% (342)

see, this clustering was an important determinant of the type and frequency of program services (such as attendance outreach and guidance) students received. Not only services, but also program outcomes were different for these different groups of students. Accordingly, we present here the differences in their background characteristics, in order to set the stage for the analysis of their outcomes.

PCEN students did not differ from program students overall in terms of prior year attendance and course performance. Females were slightly more likely to be enrolled in PCEN classes: 50% of the PCEN students were female, whereas they comprised 47% of the entire program population.

However, on two other indicators, PCEN students did differ more substantially from program students overall. Although 52% of the total DPP population was not overage for grade level, only 46% of the students in PCEN remedial classes were not overage. A higher proportion of students one year overage were enrolled in the remedial classes (38%) than in the program overall (31%). Second, students with limited-English proficiency, using and of the criteria we have described, were much less likely to be part of PCEN classes. Combining all students who meet one or another of the criteria for LEP status, 11% of the PCEN students were limited-English proficient, compared to 22% of all program students. Thus, while the PCEN students may have been slightly more at risk due to the larger proportions of overage students, they were less at risk in terms of language ability.

In contrast, the prior year performance of students enrolled in enrichment classes was slightly better than that for program students overall. Students in the enrichment classes had average prior attendance of 79%, compared to 77% for all program students. They passed on average 72% of their prior year courses, compared to 70% for all program students. Of the students in enrichment classes, 47% were not overage for grade (compared to 52% in the program overall) and 34% were one year overage (compared to 31% in the program overall). Finally, limited-English proficient students made up 18% of the enrollment in enrichment classes, compared to 22% in the program overall. This last finding may reflect the fact that limited-English proficient students were not able to take the examinations required for PCEN placement, and so were put in enrichment classes instead.

Some students were enrolled in both PCEN/remedial and enrichment classes; it is this breakdown of students into categories of those who participated in remedial classes, enrichment classes, both, or neither which will be most salient when we consider program outcomes in Chapter 5. Table 2-8 shows the entering characteristics of these four groups of students. Females were more likely than males to be enrolled in both

TABLE 2-8

Background Characteristics of Students Enrolled in PCEN/Remedial Classes, Enrichment Classes, Both, or Neither
DPP Middle Schools, 1987-88

	PCEN/Remediation Classes Alone	Enrichment Classes Alone	Both PCEN and Enrichment	Neither
Total N	1797	545	223	2187
Males	51% (917)	54% (294)	47% (104)	54% (1187)
Females	49% (880)	46% (251)	53% (119)	46% (1000)
Students meeting BOE criterion for limited-English proficiency*	5% (88)	10% (55)	8% (18)	10% (219)
Students meeting expanded criteria for limited-English proficiency**	6% (105)	9% (49)	9% (19)	17% (380)
Average prior year (1986-87) attendance	76.2% (1788)	80.7% (545)	78.4% (223)	70.5% (2077)
Average prior year (1986-87) courses passed	70.6% (1665)	76.9% (506)	60.8% (215)	68.3% (1986)

* The Board of Education's criterion for limited-English proficiency is scoring below the 20th percentile on the Language Assessment Battery (LAB).

** The expanded criteria for limited-English proficiency are: scoring between the 20th and 39th percentiles on the LAB, or taking a standardized achievement test in an alternate-language format.

classes: 53% of the students in this category were female, while girls comprised only 47% of the entire DPP program enrollment. In each of the other categories, the proportion of males to females was similar to that for the program as a whole.

Students who met the Board of Education's criteria for limited-English proficiency were much less likely to be enrolled in PCEN/remedial classes alone, and more likely to have an enrichment class or neither class. A similar pattern holds when we use the expanded definition of limited-English proficiency. While students who are considered to have limited skills in English make up 20% of the program population, they are 27% of the students receiving neither PCEN nor enrichment classes, only 11% of the students in remedial classes, and only 17% of the students enrolled both in remedial and enrichment classes. LEP students appear to be fairly represented in the category of students taking enrichment classes.

Average prior year (1986-87) attendance for students in the four groups ranged from 76% to 80%, a relatively narrow spread (see Table 2-8). Students enrolled in enrichment alone had the highest average prior year attendance (80%), while students receiving neither remedial nor enrichment classes had the lowest (76%). The spread for prior year subjects passed was greater, ranging from average passing rates of just 61% for students enrolled in both remediation and enrichment classes, to 77% for students in the enrichment classes alone. No group had the lowest averages for both prior year attendance and courses passed, but the group of students enrolled only in enrichment classes had the highest prior year attendance and courses passed rates. This is consistent with the observation that enrichment students were generally those who were not eligible for remedial instruction.

The students who received either PCEN or enrichment classes, or both, were combined into a single category, called "Clustered Students," in order to summarize the effects of being grouped together for at least part of the school day, and thus being more accessible to program staff for service delivery. Using this categorization, the prior year attendance of clustered students was 77%, compared to 71% for students not clustered. There is another difference between the two groups which is essential in understanding their later differences in performance outcomes. Table 2-9 shows the monthly attendance in the fall for clustered and non-clustered students. Right away in September and October, before most students were even selected for PCEN or enrichment classes, the attendance patterns of the two groups were quite different. It thus appears that one major reason for which students were selected for PCEN and/or enrichment classes was that they were in school more frequently and were available for special programming. Later differences in the outcomes for the two groups may, therefore, simply reflect differences in their

TABLE 2-9

Fall 1987 Attendance for Students
by Whether They Were Clustered Together
DPP Middle Schools, 1987-88

Month	--- Average Attendance --- Cluster	Not in Cluster
September, 1987	87.9%	81.7%
October, 1987	83.5%	76.9%
November,1987	81.0%	75.8%
December, 1987	78.4%	72.5%
1986-87 Average Attendance	77.2%	70.6%

patterns of school attendance (and, most likely, course performance) that were present even prior to PCEN or enrichment class enrollment.

Reasons for Program Enrollment

There were seventeen different eligibility criteria under which students could be enrolled in the Dropout Prevention Program during 1987-88. Forty percent of the students were admitted because they had had 30-74 absences the prior year, and an additional thirteen percent because they had had 15-37 absences the prior spring term. Thus, just over half (53%) of the students were enrolled in the program on the basis of prior year attendance alone.

All of the other eligibility criteria were utilized as well. Table 2-10 shows the proportion of students enrolled in the Dropout Prevention Program under each criterion. After prior year attendance, the next most frequently used selection criterion was "principal's discretion;" eleven percent of the students fell into this category. Five percent of the students were enrolled in the program because they did not meet the absence criteria but did have two or more other risk factors, including a low reading score, two or more subject failures, excessive lateness to school, being overage for grade, being limited-English proficient, or living in temporary housing. An additional four percent of the students entered the program on the basis of their Fall, 1988, attendance. (Information on reason for program eligibility was missing for 19% of the students.)

Students with multiple risk characteristics. Using data from individual student files on the central Board computer data base, as well as check-off information from the MSSR forms, we examined the number of students with more than one of the following risk characteristics:

a) 30 or more absences in 1986-87;
b) 20 or more half-day absences in 1986-87;
c) reading two or more years below grade level;
d) two or more course failures in 1986-87;
e) two or more years overage for grade;
f) meets Board criteria for limited-English proficiency;
g) other indicator of limited-English proficiency;
h) long-term absentee in 1986-87.

Nearly twelve percent of the program students were not found to have any of these characteristics; presumably these students were enrolled in the program for reasons not covered by these criteria, for example under the "principal's discretion" category for eligibility. Approximately one-third of the students had

TABLE 2-10

Reasons for Program Enrollment
DPP Middle Schools, 1987-88

Selection Criterion	Number of Students	Percent of Total Roster
1. 30-74 absences in 1986-87	1906	40%
2. 15-37 absences, Spring 1987	610	13%
3. 25-29 absences in 1986-87 and:		
a) Participant in 1986-87 AIDP or DPP program	42	1%
b) 1987 DRP test score at or below 35th %ile	146	3%
c) 2+ major subject failures in 1987	43	1%
d) 20+ days late, 1986-87	38	1%
e) Two or more years overage for grade	8	0.2%
f) 20+ half-day absences in 1986-87	4	0.1%
g) LEP-entitled	6	0.1%
4. 22-25 absences in 1986-87 and participant in 1986-87 AIDP/DP Program	50	1%
5. Does not meet absence criteria but chosen because of two or more of the following:	237	5%
a) 1987 DRP score at or below the 35th %ile		
b) 1987 Gates eligible		
c) 2+ subject failures in 1986-87		
d) student in temporary housing		
e) 20+ days late in 1986-87		
f) 2 or more years overage for grade		
g) LEP entitled		
6. LTA 1986-87 and in school 10 or more days in Sept-Oct., 1987	21	0.4%
7. Absent 10 or more days in Sept-Oct, 1987, but not LTA or No-Show	36	1%
8. 15-37 absences from Sept. 1987 - Jan. 1988	145	3%
9. 12-14 absences from Sept. 1987 - Jan. 1988 and 2+ subject failures in the second marking period	12	0.3%
10. Principal's discretion	518	11%
11. Participated in an AIDP/DP Program in 1986-87 (Transitional)	25	0.5%
No information given on selection criteria	905	19%
		100%

just one of these characteristics, and another 28 percent had two of these characteristics. Twenty percent had three characteristics, and seven percent had four.

Table 2-11 shows the proportion of program students in three categories: students with 0-1 risk factors, those with 2-3 risk factors, and those with four or more risk factors. There were some school-level differences in the proportions of students enrolled in the Dropout Prevention Program who had more than one risk characteristic; these are also shown in Table 2-11.

Conclusion

Several of the student characteristics discussed in this chapter bear special attention as we progress through discussing the implementation and outcomes of the Dropout Prevention Program. First, given the somewhat greater proportion of males than females enrolled in the program, and given further the differences noted in prior year course performance between males and females, we must ask whether the program is able to address the special needs of male students. Second, given that so many of the students are overage for grade level, is there any special effort to see that these students are promoted the following year? Finally, how does selection for PCEN or enrichment classes relate to the receipt of program services and program outcomes?

TABLE 2-11

Students with Different Numbers of Risk Factors, by School
DPP Middle Schools, 1987-88

School	Total N*	0-1 Risk Factors (N)		2-3 Risk Factors (N)		4+ Risk Factors (N)	
OVERALL	4553	45.6%	(2077)	46.3%	(2108)	8.1%	(368)
School-Alone Model	3063	42.3%	(1297)	48.9%	(1497)	8.8%	(269)
14	166	43.4%	(72)	49.4%	(82)	7.2%	(12)
15	183	33.9%	(62)	56.3%	(103)	9.8%	(18)
17	129	54.3%	(70)	41.1%	(53)	4.7%	(6)
18	160	29.4%	(47)	60.6%	(97)	10.0%	(16)
20	184	48.9%	(90)	44.6%	(82)	6.5%	(12)
21	145	46.9%	(68)	44.8%	(65)	8.3%	(12)
24	148	41.2%	(61)	44.6%	(66)	14.2%	(21)
25	180	43.9%	(79)	50.0%	(90)	6.1%	(11)
28	155	34.2%	(53)	58.1%	(90)	7.7%	(12)
29	171	25.1%	(43)	51.5%	(88)	23.4%	(40)
31	199	48.2%	(96)	44.7%	(89)	7.0%	(14)
33	180	58.9%	(106)	40.0%	(72)	1.1%	(2)
34	141	22.7%	(32)	70.9%	(100)	6.4%	(9)
35	170	58.2%	(99)	36.5%	(62)	5.3%	(9)
36	234	48.7%	(114)	47.0%	(110)	4.3%	(10)
38	153	40.5%	(62)	47.7%	(73)	11.8%	(18)
39	165	34.5%	(57)	54.5%	(90)	10.9%	(18)
41	200	43.0%	(86)	42.5%	(85)	14.5%	(29)
CBO/School Model	1340	47.0%	(630)	45.6%	(611)	7.4%	(99)
16	95	57.9%	(55)	37.9%	(36)	4.2%	(4)
19	105	44.8%	(47)	49.5%	(52)	5.7%	(6)
22	125	37.6%	(47)	52.8%	(66)	9.6%	(12)
23	123	40.7%	(50)	47.2%	(58)	12.2%	(15)
26	235	60.9%	(143)	37.0%	(87)	2.1%	(5)
27	106	50.0%	(53)	46.2%	(49)	3.8%	(4)
30	107	56.1%	(60)	41.1%	(44)	2.8%	(3)
32	113	27.4%	(31)	59.3%	(67)	13.3%	(15)
37	118	32.2%	(38)	53.4%	(63)	14.4%	(17)
40	113	51.3%	(58)	38.9%	(44)	9.7%	(11)
42	100	48.0%	(48)	45.0%	(45)	7.0%	(7)

*The total N is the number of students for whom information on risk factors was available.

Chapter Three

IMPLEMENTATION OF THE MIDDLE SCHOOL DROPOUT PREVENTION PROGRAM IN 1987-88

Year Three of the Dropout Prevention Initiative was meant to improve students' attendance and their progress toward school completion by emphasizing

> the improvement of attendance services, the integration of these services with the entire educational program of the school, and the coordination of dropout prevention services with compensatory education services supported with State and Federal Funds (Special Circular #37, May 8, 1987, p. 2).

The process and consequences of how this mandate was carried out in Year Three are very important to describe, both to appreciate the effort that was made to implement the program and to understand what influenced the program outcomes.

Data Sources on Implementation

This chapter draws on the following data sources:

(1) The Office of Student Progress (OSP) 1987-88 AIDP Site Visit Reports for all 29 middle schools in the DPP.

(2) The Office of Student Progress 1987-88 AIDP/DPP CBO Middle School Site Visit Reports for the 11 middle schools in the CBO model.

(3) Decision sheets or minutes of Pupil Personnel Committee (PPC) meetings for 20 schools, collected by the Office of Student Progress.

(4) Teachers College staff observations, interviews of DPP staff and students, and examination of instructional materials in 10 schools (randomly drawn from eight districts representing both CBO and School Alone models), especially focusing on implementation of the alternative education component.

(5) Thirty responses to a Teachers College DPP Staff Survey from staff representing 20 of the 29 schools.

(6) A conference meeting and telephone exchanges with staff of the Office of Student Progress.

(7) Extensive records at Teachers College of the

implementation of the program in all 29 schools during the first two years of the DPP.

The availability of the Office of Student Progress records and staff to the Teachers College staff has greatly strengthened this evaluation. It is important to be able to acknowledge this and to remain objective about OSP's role in the implementation of the program.

Changes in the Six Required Service Components

Overall, the program in Year Three consisted of the same six components that made up the program in Years One and Two: facilitation, attendance outreach, guidance and counseling services, health services, school level linkages, and alternative education programs. However, there were a number of changes intended in these services, most of them responding to feedback OSP (or the Board of Education more generally) had received from the evaluation and from the schools. The following changes were specified in Circular #37:

(1) Facilitation of services was funded as a full-time staff position;

(2) Attendance outreach was to stress greater parental involvement;

(3) Guidance and counseling services were to involve parents more;

(4) Better coordination with the Department of Health Services was to be effected;

(5) School linkage services were to commence in the fall semester; and

(6) Mandated alternative education programs were to occur during the school day and to meet the following additional requirements:

(a) The student/adult ratio must be lower than in regular instructional programs.

(b) Transitional services must be made available to students returning to school after absences.

(c) Peer mentors must be used in the program.

(d) Tax levy funds must be used for the basic instructional program.

(e) Compensatory instructional costs must be charged to Federal and State reimbursable programs. Mandated alternative education programs could not be charged to AIDP.

(f) Each child's instructional needs must be assessed to assure appropriate programming.

(g) Programs could not utilize pullout procedures.

(h) Districts and high schools could elect to use a program model or plan another program provided it met requirements specified in the Circular. (Circular #37, pp. 3-4.)

Implementation of the Required Components

Facilitation

1. Facilitator position. Facilitators were in place in all but three schools at the beginning of the school year in September, 1987, and were appointed in these three schools later in the fall. However, 13 of the 29 facilitators were new to the position in Year Three.

Reflecting CBO, district and school-level spending decisions and the wishes of at least some facilitators, only 13 of the schools actually utilized a full-time facilitator. In one district, a single district-level facilitator divided his time among three schools. In six of the remaining 13 schools with a part-time facilitator, the facilitator taught in the alternative education program, in addition to facilitating part time; in one the facilitator was also a DPP guidance counselor; and in the last six the facilitator's additional duties were outside of the DPP. Eleven of the 16 schools with part-time facilitators were in the CBO model, i. e., all of the CBO schools had a part-time facilitator.

Fourteen facilitators completed the Teachers College staff survey. Of these 14, seven were full-time (1.0) and seven were part-time (.4 to .8) in this position. In response to open-ended questions about the facilitator's role, five of the seven full-time facilitators volunteered that they had time to accomplish the job, including working directly with students, while five of the seven part-time facilitators stated that it was too difficult to try to fulfil two jobs at once, and that the facilitator's position should be full-time.

New facilitators were much more likely to have part-time appointments combined with other positions than were experienced facilitators. Thus the 1987-88 experience of facilitators tends

to confirm the advisablity of the change from .4 to 1.0 time for facilitation.

2. Facilitation/budget. Virtually all facilitators surveyed, whether experienced or new, observed that the funding process of the program was a major obstacle to implementation. Even though building plans and budgets were developed in the preceding spring and summer, budgets were not approved until well into the school year, in a number of cases not until the middle of the year or even the spring. The usual, already problematic Board of Education process was exacerbated by the fact that DPP budgets had to be rewritten in order to conform to guidelines for the use of New York State funds for the alternative education component. Home visits, trips and other incentives or awards for improved attendance and scholastic performance, high-school linkage activities, extended day programs, and remedial instruction programs were, in varying degrees, delayed in virtually all of the schools because of late budget approvals. OSP's part in this, as in many aspects of program implementation, involved two roles. On the one hand, they held up budgets by enforcing the city and state requirements, and on the other hand, they attempted to expedite the process by giving technical assistance for budget development, in the district offices as well as in the schools. The districts themselves varied greatly in their levels of compliance and support and district problems accounted for some of the delays in budget approvals.

Purchase orders and reimbursements for expenses were further delayed by what was described as a tortuous payment process. Certain funds were supposed to be requested six weeks in advance of their use and expenditures over $250 had to be put up for bidding. This was said to diminish substantially the discretion and flexibility of program staff, particularly for incentives, including trips, and alternative education materials. Program staff incurred a lot of out-of-pocket expenses, especially at the beginning of the year, when no funds were available for family workers' transportation expenses, student incentives, etc.

3. Pupil Personnel Committee (PPC). Every school in the DPP was required to have a Pupil Personnel Committee consisting of the program facilitator, a school administrator, an attendance outreach worker, a guidance counselor or SAPIS (Substance Abuse Prevention and Intervention Services) person, teachers, and a representative of the CBO if applicable and not already included in this list. In the PPC rosters submitted to the OSP monitors by the 29 schools, all of the above positions were represented, except in one school where to date the meetings had not included someone from the CBO (and where the school-CBO relations continued to be problematic throughout the year). Only in 19 of the schools, however, did the teachers who were identified include a tax-levy teacher, rather than or in addition to the specially funded PCEN teacher; several of these tax-levy teachers

were grade deans and about a third were identified as extended day teachers. OSP encouraged the committees to include the Health Resources Coordinator, but health was represented on only eight of the PPCs at the time of OSP's site visit. In only one school was there a parent representative on the committee, although the form for listing committee members included a space for a parent.

The committees were supposed to meet a minimum of twice a month for a total of at least three hours a month. Committees had met at least twice in November in 17 of the schools, and only once or not at all in November in the remaining schools. Minutes or "decision sheets" were supposed to be turned into OSP along with the MSSRs for each month. As of the date of the OSP site visit, decision sheets had been submitted for at least one November meeting in 14 of the schools.

After assurances of confidentiality, OSP allowed Teachers College to analyze the decision sheets from 20 of the DPP schools. For 13 of the schools, there were between 7 and 9 meetings documented, while for the others the number ranged between 1 and 6. These decision sheets provide a very valuable perspective on the work and thinking of the committees. They were, of course, written for OSP, so while they comment on implementation problems, they presumably also are meant to meet and reflect standards. The form provided by OSP for these minutes includes columns for a roster of PPC participants present, agenda or topics discussed, and decisions reached. Between them, though not in the minutes furnished for every school and certainly not in every meeting, all of the components of the DPP were discussed. The quality of the decision sheets varied considerably, which might reflect on the minute-taking as well as on the discussions and decision processes themselves. We have noticed minutes that seem to represent real attempts to address problems from schools that both lost and gained on the outcome measures. Likewise, more perfunctory minutes, or no minutes at all, were received from both gain and loss schools. This alerts us to the fact that processes were at work that would require first hand observation to comprehend fully.

Most meetings included a discussion of individual student cases, called "case management" or "case studies." There were 334 discussions of individual male students and 343 discussions of individual female students recorded in the minutes we have examined. In a number of cases, the same student was discussed at more than one meeting. It will be helpful to include at this point excerpts from a few of these cases. A more systematic analysis of the issues associated with male and female students will be presented in Chapter 4. No names of persons nor identifiers of schools will be used here or elsewhere in our report. Our purpose is to give some slight feeling for how the staff represented on the Pupil Personnel Committees perceived and

experienced the students.

"Has not been in school for past 2 weeks. Home visit must be made immediately."

"Poor attendance due to family and medical problems. S____ was upset that he scored poorly on the reading test. Mr. X will be asked to speak to S____ about chances getting into high school."

"Student has ability but refuses to attend school. Case worker not effective. Mother very cooperative."

"S____ is good student with poor attendance. Suffers from asthma. Has sporadic attendance. Parent very hard to get to cooperate. Is in Math Enrichment Class and DPP Dance Class. Both activities may help to motivate improved attendance."

"Parent sends student to school. Student doesn't show. Mother claims it is school's problem. Outreach workers informed us that student comes from drug infested building--possibility mother is involved."

"Lateness problem. Mr. X spoke to him and offered him an incentive if he came to school on time for one week. Since the agreement S____ has been on time. Incentive was given and he still comes on time. Was given extra responsibilities in school and feels important and needed."

"S____ has a baby at home and uses this as an excuse not to come to school. This morning Mr. X interviewed her mother, who was sent for. Parent agreed to send S____ to school on a regular basis and also agreed to schedule clinic appts after 3 o'clock."

"He is reading at 14% and this could be the reason for his disruptive behavior in class."

"S____ has 100% attendance since September. Outreach workers to review her report card and if she passed all her subjects she will receive the promise of a sweatshirt once the budget is approved and monies are available." [Dec 9]

"Why was S____ given 53's with only 11 days out all year and 53 denotes excessive absences? Facilitator to talk to site supervisor and subject teachers." [May 15]

"He was living with father (totally unreliable), now living with mother. Had conference with grandmother and mother [who] assured us he will attend school--marked improvement as of conference."

"S____ is overage (etc.). S____ will be placed on Service Squad (he wants very much to serve), if he lives up to standards mutually agreed upon by himself, parent, and school."

"Very bright and physically mature girl. Discussed ways we might get her involved and hooked into school. Ms. Y suggested getting her involved in African Fashion Show."

"Nice--but lazy--sit on him."

"Pupil's attendance has deteriorated. F. A. will make out post cards and do home visits. Guidance counselor will arrange individual guidance session. Request parent to come up to school."

"Pupil is late due to problems of no heat or hot water in the house."

These few examples illustrate the diversity of the issues that the Pupil Personnel Committees dealt with in individual student cases and the potential for coordinating the academic, social, psychological, and health resources available to the school and the committes. The excerpts also suggest variations in how PPC participants approached student cases and their varied success with different cases.

Responses to a Teachers College DPP Staff Survey question about the Pupil Personnel Committee were more positive than for any other element of the program except Attendance Outreach. The following comments represent different aspects of what staff found praiseworthy:

"We have gained valuable insight to the complex problems of targeted students."

"Discussion of students by whole AIDP/P staff carry more weight in resolving problems."

"The facilitator gets input from other staff members. The committee, as a group, often comes up with great suggestions in relation to the children. It is very difficult to get this kind of extensive cooperation from other staff members on school time."

Respondents from seven schools gave lower ratings and most explained them in terms of the PPC not including key personnel in the school, particularly tax-levy teachers:

"1) Should be scheduled during the day. 2) Should include staff development--teachers want and need help in working w/truant population. 3) More teachers and school staff should be involved--this year only a small group of teachers were present at every meeting."

"Many teachers are unwilling or unable to come to meetings before or after school even if they are paid."

"Every teacher in the school at some point should be involved in a PPC meeting. It should not always be the same teachers at every meeting. I believe the principals could take a more active role in encouraging other teachers to participate . . . This may also alleviate much of the negativeness that is seen around the school toward the program and students involved."

Attendance Outreach

1. Home visits. Although home visiting got off to a slow start, more home visits were attempted in 1987-88 than in 1986-87--we estimate twice as many altogether. OSP had a quota for how many visits should be accomplished in a week and their site visits looked into what proportion were successful in reaching someone in the home. While the Monthly Summary of Service Reports (MSSRs, see Chapter 4) do not distinguish between contact and no-contact visits, the minutes of the Pupil Personnel Committee meetings do show information from home visits being used in most meetings. Home visits received more explicit favorable comments on the TC DPP Staff Survey than any other element of the program, for example,

"Through home visits we have been able to ascertain valuable information which gives both the school staff and [CBO] staff insight into the student's needs and how to meet these needs more effectively in the school."

"Home visits are the most important contact we have with the parents of students. Students are aware of home visits and attendance is improved because of the visits made. The home visit permits the outreach worker to see the conditions in the home and relate them to the facilitator, this opens other avenues to the facilitator when he interviews the student."

2. Incentive point system. A major new development in attendance outreach was a point system for the awarding of incentives or rewards to students. Within general guidelines set forth by OSP, schools decided how many points to award for a student's returning notices signed by a parent, parent participation in meetings, the student's having high attendance

for a month or a semester, punctuality, passing all subjects on their report card, excellent conduct, etc. Certificates, prizes, and trips were given various point values. Students' point accumulations were posted (confirmed by the TC observations). The system allowed for twenty percent (20%) of the awards to be made to students outside DPP, which in most schools seems to have mitigated the earlier feeling that DPP was rewarding the wrong students in the school. DPP staff generally gave the new incentive system a positive rating. However, they said that its potential was blunted in the first part of the year by the nonavailability of funds for the actual incentives. Several staff also commented that the incentives worked much more successfully with some students than with others. One staff respondent observed that large-scale incentive trips required a lot of time and coordination, but the impression conveyed by Pupil Personnel Committee meeting minutes is that many schools were particularly invested in trips, including the opportunity for staff to go on trips with students.

Guidance and counseling

Full or part-time DPP funded guidance positions were not filled in four of the 18 School-Alone schools in 1988-89. In addition, TC Survey respondents from five of the SA schools that did have guidance staff volunteered that the staff appointed were inadequate, in being part-time or in not being fully qualified for the position. The 11 CBO schools were more likely to have officially qualified counseling personnel in place, but there was turnover in some positions.

There were no fundamental changes in the nature of the guidance and counseling services intended, but OSP was even more explicit with DPP staffs than in previous years about sessions needing to be offered by officially qualified personnel to count as guidance and counseling, how many sessions were expected to be offered (six individual and one group guidance session per day for a full time position), the requirement that every targeted student be included in at least one session, and the necessity of recording every session in three ways: a daily log of activity, anecdotal accounts (stating problems, actions taken, and outcomes) in individual student guidance folders, and the Monthly Summary of Service Reports. Individual guidance sessions were supposed to be of at least 20 minutes duration and group guidance sessions (incorporating 10 to 12 students per group) a full class period.

OSP site monitors in December and January reviewed the number of guidance sessions recorded on the MSSR for selected prior months. For the four SA schools where a guidance position was vacant, no sessions were recorded. In the remaining 14 SA schools, OSP monitors remarked that the records showed too few

individual and/or group guidance sessions in 9 schools, too many group sessions in one school, and groups that were too large in one school. In six of the 11 CBO schools, OSP observed too few individual and/or group sessions recorded. OSP monitors found the documentation of the guidance sessions, particularly the anecdotal records, inadequate in nine of the 14 PC schools that had a guidance staff and inadequate in five of the 11 CBO schools.

The OSP Site Visit Reports reflect the monitoring role of OSP on this occasion and perhaps should be expected to toe a hard line and to focus on the discrepancies between performance and expectations. From this standpoint, one would expect to see an increase in counseling and guidance sessions in the remainder of the year as a result of OSP's "technical assistance." In fact, however, as Chapter 4 will show, the monthly average of individual guidance sessions remained about the same in January through June that it was in September through December, while the average number of group guidance sessions recorded declined substantially after the OSP site visits. Perhaps we are seeing here the effect of OSP's telling the schools that certain activities could not be counted as group guidance. Overall, the average number of individual guidance sessions received by a DPP student was about half the number one would expect from OSP's formula for a full-time counseling position or its equivalent, while the average number of group guidance sessions reported for a DPP student was about one-fourth the number to be expected from the OSP formula. Taking parent guidance sessions into account does not substantially change these proportions, since there were relatively few parent guidance sessions recorded.

Vacancies and half-time positions, again, account for part of the short-fall in guidance and counseling sessions. In addition, some of the sessions listed as "student conferences" rather than as guidance and counseling no doubt had guidance properties. In one school where the guidance position was vacant (the school with the strongest student gains of all 29 DPP schools!), family workers were said to have provided effective guidance to students. Nonetheless, student conferences did not officially count as guidance, and presumably the formula allowed that there would be student conferences in addition to counseling and guidance.

A third of the respondents to the TC DPP Staff Survey volunteered that "paper work" cut down on the time they had for contact with students. The documentation OSP required, as indicated above, might not seem like an unreasonable amount, but it might have become more difficult as a counselor got more involved in serial interactions, especially in crisis counseling. Another problem that was emphasized in survey responses was the difficulty of getting access to DPP students when they were not grouped together for at least one class. Even when there were

appointments, staff had to go looking for these students more often than not, which not only required time but also precipitated other interactions. This situation fed into a pattern that will be disclosed in more detail below, a tendency in almost all of the schools for the students who were clustered together for alternative education classes to receive more counseling and guidance services than students whose programs did not reflect this clustering. In hindsight, one realizes that virtually all DPP students had been accessible in 1986-87, when they were present in school, through being programmed for career education.

OSP's point of view, communicated to TC in interviews, is that there has been a culture of low accountability in middle school guidance, reflected in both low numbers of sessions with students and poor documentation. Thus OSP was trying to change these norms by enforcing higher standards.

The total number of recorded parent guidance and counseling sessions or conferences averaged about one per student in 1987-88, which was somewhat less than the average of 1.5 for 1986-87 that can be projected from the three months of MSSR data TC has for that year.

Parent involvement

Circular #37 stressed the importance of increasing the involvement of parents in the DPP. As indicated already, home visits attempted did increase in 1987-88 compared to 1986-87, but parent guidance and counseling sessions or conferences did not increase.

In line with outreach to parents, OSP required every school to plan and carry out four special events--receptions, workshops, etc.--to increase parent participation in the schools. This parent involvement effort got off to a relatively late start in most schools. In December and January, the OSP monitors found that parent involvement activities had already occurred in only 13 of the 29 schools, and in only eight of these had ten or more DPP parents been involved. In one school, categorically different from the rest, four activities had been sponsored by the DPP in November and December, including a dinner and raffle of a color TV (58 parents), tuberculosis screenings (163 parents), an asthma clinic (27 parents), and a Christmas party (41 parents). This school (TC code #29) had the highest combined attendance and courses passed gains of all of the schools in 1987-88, and has consistently been a gain school since the inception of the program.

Only nine of the 29 schools had planned further activities for later in the year at the time of the OSP site visit, and the

monitors advised the schools to submit plans for a total of four activities to OSP. From the Pupil Personnel Committee minutes it can be seen that dinners for parents, for example on an open-school night, were particularly successful. One school that was in AIDP but not DPP (the school's PPC minutes were inadvertantly included with the others supplied to TC) held a well-attended meeting for parents in a notorious welfare hotel that housed a number of students' families. One DPP school noted that parents were unexpectedly enthusiastic about the incentive point system, and that 70% had returned signed letters acknowledging their approval of the system. Workshops, on topics like Stress Management or Living with Your Adolescent, generally seemed to have disappointing attendance.

The comments on the TC DPP Staff Survey are particularly sobering on parent involvement. Seven respondents left the space blank. Ten wrote comments like the following:

> "This is a piece we must expand."
>
> "Parental involvement is difficult. Parents work or are home with younger children and can not go on trips or take part in parental involvement programs."
>
> "We were not successful in this area as of this date. We have tried just about every approach to attract parents to the school for workshops but have failed."
>
> "There has been a poor response on behalf of parents to planned activities and incentives."

Another seven responses were more ambiguous, including the following useful observation from a family worker in a SA school:

> "Getting parental involvement in the school has always been a major problem, more so today than ever before because so many parents, the majority being single, are full-time working parents. We've had success in getting only a few parents involved with their children in school. It has been my observation that if we want parents to become more active in the schools, [we have to] involve their children, utilize them in some positive way. Have them put on plays in the evenings, recitals, or positive entertainments, using parental involvement as a criteria for participation. Set aside fifteen or twenty minutes during that time to speak with the parents, having refreshments available for them."

Finally, six respondents, including two from School #29 cited above, indicated that their involvement of parents was excellent or at least improving. The most informative of these responses is the following from School #39:

"Involvement of parents and the community at large has increased this year in that
a) a session for parents was held involving High School linkage,
b) workshops were run in order to familiarize the parents with School #39 and the program in the school,
c) a strong link has been established with the PTA,
d) strong links have been established with other on-going programs in the school such as the 1) drug program 2) I Have a Dream Program.

Health services

Reflecting the new regulations requiring that there be a Health Resources Coordinator in every school, only two of the 29 schools did not have an individual identified as a Health Resources Coordinator or equivalent at the time of the OSP site visit. However, in ten more of the 29 schools there was no evidence in December-January of health services being linked to DPP, for example through the review of health records for the roster of targeted students. If students had been served, and undoubtedly some or many had through the normal operations of a school health office, it was not facilitated by DPP nor reflected on DPP records. In seventeen schools, there was documentation of at least some services to DPP students: health record review, vision screening, hearing screening, and/or physical examinations, ranging between 11 and 278 services in a school. It also appeared that more services had been performed than were reflected on the MSSRs in some of these latter schools, which OSP urged the schools to correct. Especially in the schools where services had not been indicated for DPP students, OSP gave technical assistance on the implementation of the health component.

The respondents to the TC DPP Staff Survey tended to be indifferent or negative toward the health component. Twelve left the health services section blank. Six explicitly said that the component was unsuccessful, for example,

"This portion of the program has not started and there is no real program or plan to get it going."

"Most definitely needed, many students go through the year without being serviced because of our limited HRC services."

Another seven responses suggested limited or perfunctory accomplishment, for instance,

"Beyond a review of Health Records, nothing much has happened."

"DPP clerical aide interfaces directly with Health Aide."

Lastly, five respondents, including again the two from the exceptionally successful School #29, claimed to have very successful health programs.

"Very effective--we have had clinics run for asthma, AIDS, diabetes, overweight."

"Health services are a vital link to the program in that all the students were vision and hearing tested during the fall term. As a result of this testing appointments with various local clinics were made in order to correct some of the problems that were uncovered."

"The Health Coordinator is an extremely talented crisis intervention counselor who has close contact with Community Based Organizations [this was not a CBO model school] which service our children and their families."

That DPP program staff saw health as a major problem is indicated by the high proportion of cases discussed in the Pupil Personnel Committee meetings that had a specific health element, usually a problem other than vision or hearing. This will be further discussed in Chapter 4.

High-school linkage

According to the MSSRs (see Chapter 4), the average DPP targeted student received a total of 0.15 high school linkage services between September and December, 1988, i. e, about one out of six students, on average, received a single service during these four months. This ill matches the goal set forth in the Chancellor's Circular #37 to initiate linkage activities in the first half of the fall 1987 semester. The MSSR data are consistent with the findings of the OSP site monitors in December and January, but the monitors made little effort to stimulate further planning of high school linkage at this time. The explanation for all of this seems to be that the linkage activities were dependent on high school participation, and that the high school linkage component was not funded until February. The Pupil Personnel Committee meeting minutes and the MSSRs do reflect more linkage activity in the spring. Shadowing, in which a middle school student followed a high school student through part of a school day, seemed to be a particularly successful activity when it occurred, though even in the spring relatively few students had this experience.

Fifteen respondents to the TC DPP Staff Survey gave the high school linkage component a mediocre or lower rating, explaining this with comments like the following:

"Never has actually been implemented."

"Very little incentive put out by the high school."

"Very poor cooperation from the high schools. The after-school components do not meet the needs of our students."

"Program starting on 4/14/88. No money provided to pay teachers. No transportation. Very poor program."

Eleven respondents found something positive to say about the program, but also qualified this in some way:

"More high schools should be involved in the linkage, out of area schools."

"Current linkage with High School X [which had a shadowing program] has been helpful for students. Students are more interested in going there now. However, linkage at HSX is done in a disorganized fashion. There are many details left to chance which creates the atmosphere of haphazardness. The programs were frustrating."

"Not done early enough in the year to be effective."

Finally, just three respondents (not from School #29!) thought that high school linkage was very effective, commenting that

"[The program] provides student awareness on a high school level."

"They got an overview about high schools."

The evaluation's finding in 1986-87 that the greatest losses at the high school level in attendance and, especially, courses passed were incurred by students making the transition from middle school to high school underscores the importance of the linkage component and the potential seriousness of the failure to implement it in 1987-88.

Alternative education

What in fact seemed to drive a great deal of the implementation effort in the fall was the alternative education component. It is necessary to examine the evolution of this component, in order to grasp its effects on the program as a whole.

Responding to feedback from the schools and from the Year One evaluation, OSP decided to involve the districts and their schools directly in the planning of a new alternative education component for the Dropout Prevention Program. The Chancellor's Circular #37, May 8, 1987, spelled out the changes, and in late spring the Deputy Director of OSP visited the districts and met with principals to explain the new thrust. The districts and schools were given four models to choose from:

(1) A Mini-School Model
(2) a Block Program Model
(3) a Remedial/Enrichment Teacher Model and
(4) a District-Developed Model.

General program, position, and budget parameters were specified for each option, but also left room for local decision making. The target date for implementation was announced as September, 1987. When school ended in June, a number of schools were very involved in planning. The Remedial/Enrichment Teacher model was the majority choice, but all models were selected by or for at least one DPP school.

Potential gains for DPP targeted students could have resulted from two features of the new alternative education component:

(1) the involvement of the districts and schools in the planning of the component, and

(2) the closer link between dropout prevention services and the core academic program of the schools.

From the start, two features of the new action were potential liabilities:

(1) the fact that career education, which had originally been the main emphasis of the alternative education component, was largely scrapped to make way for academic enrichment and remediation. DPP staff in the schools had indeed themselves rejected a very work-sheet oriented career education curriculum that OSP had attempted to implement in Year Two. However, career education also included a number of hands-on, experiential activities which had been developed under the earlier guidelines. The evaluation in Year Two observed that these activities were a medium for positive interaction between staff and students, and found them in most of the schools that showed student gains in Year Two. The loss of these experiential activities would need to be compensated for by similar activities in the new program design.

(2) the short lead-time allowed for implementing the new

component. It assumed that all the pieces would fall into place over the summer, which of course almost never happens, and which in this case was confounded by events at the New York State level.

Circular #37 specified that compensatory instructional costs must be charged to Federal and State reiumbursable programs and that mandated alternative education programs could not be charged to AIDP (or DPP). The circular seemed to anticipate that New York State Pupils with Compensatory Education Needs (PCEN) funds would be used, but not the specific consequences of using these funds.

1. PCEN implementation problems. While planning, selection of students for the program, assignment of teaching responsibilities, and recruiting for new positions proceeded in late spring and early summer, the New York State Education Committee decided to hold hearings on what form the PCEN program should take. It was generally anticipated that the committee would come in with recommendations that would, like the Board of Education models, emphasize enrichment more than remediation. However, the committee, and then the legislature, wrote a bill making PCEN a purely remedial program for students below the 50th percentile for grade on a reading or mathematics achievement test.

In addition to the constraints already indicated--that only remediation services could be funded by PCEN and that these services could only be given to students scoring below the 50th percentile on standardized tests--the new legislation also mandated that students had to be programmed for the remediation classes, i. e., they could not be pulled out from other subjects on an ad hoc basis. Finally, students could not be receiving both Title I and PCEN funded instruction.

The result of the PCEN legislation was that most of the plans districts and schools had underway had to be modified or abandoned. Enrichment programs were in theory not justifiable, new teachers had to be found in many schools, and new students had to be targeted for service in some schools to meet the eligibility requirements. The schools and districts that had the most to lose were those who had responded most energetically to OSP's original initiative and whose plans for the fall were farthest along. Furthermore, the consequences of the new regulations did not become transparent to the schools in many cases until the OSP monitors determined--through successively reviewing, from September through January, targeted students' eligibility, needs assessment procedures, program plans, and the PCEN classes that finally resulted--that one or another feature of the programs settled on in the schools was not in compliance with the regulations.

Some of the problems that were discovered in the visits of the TC evaluation staff to the schools included budget not being approved until November, or much later, in some schools; a school's having to delay implementation of a program until a suitable instrument for pre- and post-tests was found; students having to be re-selected and re-programmed in order to meet PCEN criteria; new staff needing to be hired; reconfigurations of staff, including even the elimination of positions as students were programmed for PCEN instruction in some schools; and inadequate supplies in some schools. The TC visitors did find adequate space provided for the classes in all of the schools visited.

What must not be lost sight of in this account is that OSP and the schools did get the PCEN program operating in perhaps three-quarters of the schools by November, 1987, and in 25 of the 29 schools by January, 1988. Mathematics was focused on in 10 of these schools, reading/writing/and/or language arts was the focus of another 6, and both mathematics and one or another language art was focused on in the remaining 9 schools with programs in place by January. OSP monitors noted individual student folders being used, in most cases containing students' work, in 15 of the schools at the time of the site visit.

2. Observations in the PCEN classes. Both from OSP Site Visit records and the observations of TC visitors, it is evident that the quality of the classes and students' attendance in December and January varied drastically. Five of nine sample schools visited by TC had chosen math as the subject area, while three chose reading and math and one chose reading. The math curriculum in all of the schools consisted of three areas: concept development, computational skills development, and problem solving. There were differences in the amount of time devoted to the three areas. All of the math classes, with the exception of one, used group and individual instruction.

One class observed by TC was still working on basic multiplication and division skills in January. The teacher was trying to get the students to memorize the multiplication tables. In contrast, in another class the teacher was giving instruction on factoring rational numbers concentrating on the concept even though the students had not yet mastered all of the multiplication tables. If a student did not know a fact, another student or the teacher supplied the fact and the lesson continued. The teacher made it clear that he expected those who had not yet mastered the tables to do that at another time, outside of the classroom. This teacher used his and the students' lunch time for individual tutoring. When interviewed, he reported that some of his students first came to him, overall, working at a sixth grade level, while now they were working at an eighth grade level. Others who came working at a fourth grade

level were currently operating on a sixth grade level. His material consisted of ditto handouts and the chalkboard. He was still waiting for books.

One school visited elected to use an "architecture approach" involving bridge building (called the Salvadori method after the professor who developed it). The OSP Site Visit Report in December had noted, "PCEN teachers go to JHS___ for staff development training in Salvadori Program" etc. A month later, at the time of the TC visit, a kit containing the materials for the project was sitting in the DDP office unopened, while the teacher used ditto materials and a blackboard to teach multiplication with fractions.

In contrast to the school where the teacher was given no materials as of early January and this second where the teacher had the materials but did not use them, in a third school the teacher was provided with materials, including manipulative materials for the current topic, fractions and measurement. This teacher had also brought in materials of her own for the students to use in a hands-on approach to the topic. Strong support and advice were provided by the chair of the department. The classes were set up so that each student had group lessons early in the week and individual tutoring in a period later in the week. There were two computers in the room for individually prescribed work but the teacher explained that as many as she needed were always available. The chair had also provided complete mastery tests for every chapter in the math books being used along with a computer printout of a progress report based on the mastery test showing exactly which chapter objectives had been achieved. The teacher then developed further strategies for reteaching the areas the students had not mastered.

Three of the four reading classes in the sample schools used group instruction with individual help where needed. One teacher used only individualized instruction. In three classes visited, workbooks and reading kits were being used. One of the teachers described trying to get the students to read actual books but said that they could not sustain interest long enough to finish. No evidence of career oriented materials or high interest magazines was seen in these classrooms.

Attendance varied considerably in the classrooms visited by the TC observers. In TC visits to five classes with registers of about 15 students, two had no students present, two had eight and one had eleven students present. In two more classes, no students were present. In a class with a register of eight students, just three were present. All of the teachers described difficulty in maintaining continuity and reinforcement in teaching with eratic attendance.

OSP monitors recorded attendance in their observations of a

total of 24 PCEN classes in the 29 schools. Using the OSP numbers, we calculate that an average of 15.7 students were registered for these classes and an average of 10.5 attended on the OSP observation days (not including two classes where the teacher was absent). The attendance rate resulting from these figures (67%) is somewhat lower than the average school attendance rate that we found for the PCEN students for the year (77%, see Chapter 5). It is possible that students did not attend PCEN classes on the average as much as they attended school, or indeed, as one PCEN teacher reported to an OSP monitor, that teachers did not always release students from classes from which there were "scheduled pullouts". Alternatively, attendance at PCEN might have improved later in the winter and spring. In either case, it can be appreciated how the PCEN classes became the focus for a substantial amount of the DPP attendance outreach, as will be shown in the next chapter.

3. Enrichment programs. Students who were not eligible for PCEN instruction were included in enrichment programs in 12 of the 29 schools. In some cases, the students participated in the PCEN classes, but were simply categorized as having enrichment for funding purposes. In other cases, the enrichment tended to emphasize life skills and/or career education. In a few schools, some DPP students received both PCEN remedial instruction and enrichment.

4. Extended days. Schools varied widely, particularly on a district basis, in whether or how much they utilized extended days. None of the schools in District 32 funded extended days through DPP, while all of the schools in Districts 3 and 7 had substantial after-school programs. At the time of OSP's monitoring visits, extended day programs had been started in 14 of the schools and there were plans for programs in 6 more. The programs were characterized by OSP as enrichment, remediation, enterprise, and recreation, and they were identified by OSP in this order of frequency. Tutoring and homework helping were the main emphases of remediation, while enrichment included a wide variety of activities: board games, computers, dance, etc. Enterprise activities tended to emphasize crafts and recreation stressed physical fitness exercise and basketball. The number of extended day sessions for the average DPP student increased in the months of January through March (2.4 total per student for these months together) compared to September through December (1.2 total), and settled back to a middle level in April through June (1.8 total).

5. Student reactions. Thirty-nine (39) students were interviewed in the ten DPP schools visited by TC to observe alternative education. There were about even numbers of positive and negative responses to a question asking them whether or not the instructors in the remedial programs helped them understand math or reading better than their regular teachers. Likewise,

the students were pretty evenly split on whether they thought their math and reading performance was improving over the previous year. Consistent with what has been learned in other investigations, students reported better relations with teachers who took their time to explain, patiently, how to approach a problem. Responses similar to this were consistent throughout the student interviews. Students expressed clear resentment toward teachers who attempted to make them look "stupid" and who rushed on to a next section without making sure that students understood the preceding section. Students indicated that they resent being bored. They respected firm and consistent teaching practices and consistent application of school rules.

With regard to the entire attendance improvement program, most of the students said that the program, specifically the attendance incentives, field trips, dinners and after school activities, did make a difference in their interest in coming to school. Male respondents indicated that they wished there were more sports activities, or, in some cases, any sports activities (because some schools had no gym program). Three (only) of the thirty-nine students felt that the program was a waste of time. One student voiced what others seemed not to be conscious of, that students are left out of the planning of program activities and not consulted on what they want to do.

6. Staff reactions. DPP Staff feedback on the process of implementation of the PCEN program has been incorporated into earlier sections of this analysis. Representative comments are the following:

> "Conceptually a great idea, however this is the type of information [for planning of alternative education] that is desperately needed prior to the programming of the fall of the school year, ideally in May of the year preceding in order that the schedule can begin in September of the school year."

> "1) Students were programmed incorrectly. The enrichment LA classes were scheduled parallel to the LA class schedule and the remedial math classes took the place of the mainstream math courses. 2) Students were not identified by September and students entered the classes as late as December. 3) Even though students qualified for the alternative education program, the guidance department refused to move many children after classes began in September."

A question asking staff to evaluate the alternative education program as implemented received just seven positive ratings. The following comments were offered:

> "The remediation component is a big success. The children need this help and the teacher is an expert in his area and

he likes the children and the program."

"Once the program began the confusion was dispelled."

Sixteen staff gave alternative education a neutral rating or marked it 'N.A.'. Of eight negative responses, three (from different schools) criticized its being a "pullout" program--a label that stuck in some schools even when the students were parallel programmed. Comments directed more to the substance of the program included the following:

> "Students were 'turned off' by remediation classes. Alternative Ed classes for truant students at risk need to be more stimulative and make youngsters want to come to school. Activities need to be hands-on type."

> "My only point here is that the program is considered a punishment to our students. Our students' peers get to be in cooking and typing while our students are in a Math Lab which can be tedious and boring. Math Lab was a constant frustration for students."

> "There needs to be a curriculum tailored to the needs of the client population including systematic math and reading skills development. Presently kids are homogeneously grouped to be marginalized. There is no set of goals and academic curriculum for remediation. Reading teacher has same students 22 periods a week with no orientation to their needs nor curriculum goals."

Elsewhere in the survey, some staff volunteered that the changed emphasis of alternative education had resulted in the loss of elements previously valued in the program, for example,

> "Many changes have occurred during the school year 87-88 at IS___. Classes such as shop, art, and cooking have been eliminated, making it virtually impossible to work with students on enterprises."

A few staff, on the other hand, volunteered positive remarks about other elements of alternative education, for instance,

> "[We have created] an expanded work study program and after-school programs that are designed to meet the needs of a wide range of students."

Circular #37 had mandated that there be "transitional services" for students returning to school after absences and the OSP reports do take note of these services in some of the schools. "Peer mentors" were also mandated in the circular, but there is no mention of them in any of the documents examined by

TC, unless one construes the shadowing experience in high school linkage as being conducted by a peer mentor.

Office of Student Progress

An important aspect of OSP's effort that emerges from the above review of implementation is the way in which they established joint or shared control over the planning of certain key program components. The Pupil Personnel Committee and the Incentive Point System were both operationalized by the schools within a framework of OSP expectations that was specific enough to be instrumental but was still general enough to allow the schools to tailor these components to their needs and resources. Both of these components could be improved on the basis of the kind of feedback included in the review above, but the framework allowed a good start to be made.

OSP clearly intended to implement the four original alternative education models through a similar, though much more ambitious process of shared decision making. However, the New York State PCEN regulations overrode most of the decisions made in the early planning. This then tipped the balance away from the schools. OSP staff indicated to TC midway through Year Three that they did not think monitoring of the PCEN component was compatible with their original role in the development of the DPP. PCEN required an expertise in remedial education that OSP staff did not necessarily have, which probably played into alternative education's being driven by procedures and numbers much in the way that other components, particularly attendance outreach, were already driven.

The Teachers College DPP Staff Survey included an item asking respondents to rate and comment on "MSSR feedback from OSP." Nine responses were positive and included comments like these:

> "MSSR feedback gives one an overall view of a student's progress. It can be determined through the MSSR if a student's attendance has or has not improved, and what has been done to get that student back in school."

> "The feedback has been helpful even though it has not come in a timely fashion."

Four respondents gave a neutral rating and 17 rated MSSR feedback from OSP negatively. The comments on the latter set included the following:

> "I find that the statistics compiled by OSP have little or no bearing on the school. Each student must be treated as an individual so that the numbers of telephone calls or

house visits made per month really don't reflect the individual needs of the students."

"Feedback from OSP creates unnecessary and burdensome paperwork. We still have too much paperwork."

"Have not used it. It has been difficult to get OSP printouts in time to be useful."

"No feedback unless info is missing."

"I don't think it provides anything new. I have created my own data base and frankly, it's more informative because it measures student progress, both attendance-wise and academically, against their performance last year."

As reflected in some of the responses above, one problem was that OSP tried to channel computerized feedback from the MSSR through the district offices, presumably to invoke the district facilitators' supervisory capacity. In many districts the information was not passed on to the schools or was transmitted too late to be useful. A related problem was the confusion of the issue of staff accountability with the issue of keeping track of individual students. The staff service log alone could have served the former purpose. Once this is realized, one sees more clearly the question of how well the MSSR served the purpose of monitoring services to students. Some of the responses to the TC Survey suggest that school staffs might have been more resourceful in creating their own service and outcome data systems if, as with the Incentive Point System, they had been given a more general framework and discretion to do so. In School #29, where the gains have been strongest, a large chart running half the length of an office wall, listed every targeted student in one dimension and every school day of the month in another and used various codes (HV for Home Visit, IC for Individual Counseling, A for Absence, M for Medically Excused Absence, etc.) to show at a glance the status of each student's attendance and staff services to the student. The documentation requirements of OSP were perceived as excessive in this school, at the same time that the school used data systematically to keep track of students.

Interestingly and significantly, the responses to another item in the TC Staff Survey, "Role of OSP/Central Board of Education," were positive on all but four of the 30 surveys. The following responses come from the same surveys that were quoted negatively above:

"There is a feeling of family created and sustained when we meet occasionally. I find the people knowledgeable."

"[OSP] role has become more supportive and less

adversarial."

OSP staff saw themselves in the two roles of enforcing and facilitating that we have identified at various points above. They tended to be perceived in the schools as trying to be helpful on a personal level, but at the same time as obsessed by procedures and numbers. The exceedingly bureaucratic language of the OSP Site Visit Reports supports this interpretation, not in and of itself, but because there is no written trace of another, more empathic and goal-seeking response to the endeavors in the schools. Perhaps OSP's soliciting the minutes or decision sheets of the Pupil Personnel Committees itself recognized the importance of the issues the schools perceived they were dealing with. It is our impression that the response from OSP was basically dependent on individual monitors' styles.

OSP conducted a variety of workshops for DPP (and AIDP) staff, which were cited positively in the surveys.

Summary

All in all, the "changes in [the] six required components" mandated in Circular #37 were substantially accomplished only in the area of alternative education, and there they took a direction counter to what OSP originally intended. The majority of schools did not use a full time facilitator. In most of the schools the level of parent involvement was low, though it is important that a beginning was made toward a more positive participation of parents in school and program activities. While the presence of a Health Services Coordinator in all but two of the schools represented some progress, health services still seemed to fall far short of what DPP staff in the schools felt students needed. And in a domain in which the Board of Education, though not OSP by itself, presumably did have more control, high-school linkage was very inadequate. This leaves alternative education, in which the PCEN program played the dominant role. In fact, it appears that the implementation of PCEN absorbed so much of the schools' and OSP's energies in the fall semester especially that this partially accounts for the relative lack of attention paid to positive parent participation, health, and high-school linkage before the spring.

Teachers College has carried out a quantitative as well as qualitative analysis of the OSP records. Our action thus speaks as loud as our words, that we greatly appreciate these records as research and evaluation sources. Whether the numbers are being maintained in a way that is most functional for implementation itself is a somewhat different question, however. It is best asked when we have a better idea of the correspondence between the service and outcome numbers, which will be after the further analysis presented in the next two chapters of this report.

Chapter Four

DISTRIBUTION OF SERVICES TO DPP STUDENTS IN 1987-88

The evaluation has been centrally concerned with trying to discover the relationships between students' receipt of services from the Dropout Prevention Program and the students' attendance, grades, and likelihood of persisting in school or dropping out. A key source of data for this in the middle schools is the Monthly Summary of Service Reports, which the Office of Student Progress created in 1985-86, and has revised since, for the purpose of reviewing the distribution and effects of services in the middle schools to targeted students. Teachers College computerized and analyzed a three month sample of the MSSRs for Year Two. This analysis produced some understanding of the parameters of the MSSRs which informs the current Year Three analysis. In Year Three, the Board of Education itself computerized the MSSRs for the whole ten months of the school year and made these data available to the Teachers College evaluation.

OSP Review of Documentation for the MSSRs

As in previous years, assistants from OSP visited the program sites periodically during the 1987-88 school year, and in December and January completed a Site Visit Report. This report, which Chapter 3 has already drawn upon, included the results of the assistants examining in each school the documentation for a 10% sample of the MSSRs for the month of October or November, whichever of these was most recent and available. In 14 of the 29 schools, there was very high congruence between the MSSR figures and the supporting documentation--logs of telephone calls, of letters, individual and group guidance sessions, etc. In six schools, more services had been recorded on the MSSR than were documented in logs; in two schools fewer services had been recorded than were documented; and in five cases, there were differences in both directions. In all of the aforementioned cases, however, the discrepancies were relatively minor, i. e., they constituted a fairly small proportion of the total number of observations examined. In two schools only, one a School Alone model school and one a CBO school, the discrepancies were major. This appeared to be an improvement over Year Two, particularly in that the CBO and SA schools were basically using similar procedures for recording services. This result reflected not only the OSP site visits but workshops that OSP conducted for AIDP/DPP staff.

The OSP assistants' comments on the Site Visit Reports suggest that discrepancies could be accounted for in some cases by DPP staff not taking the time to transfer observations from

logs to the MSSR, and in some cases by estimating services on the MSSR without having taken the time to document them in logs. There were some cases where staff's account of their jobs indicated that more services had been given than were recorded in any source. These explanations are consistent with Teachers College's finding in the schools in Year Two that the recording of services, as well as the actual provision of services, was affected by the staff time available for recording and the priority and procedures that a given school devoted to records. Finally, as noted in Chapter 3, OSP felt that too few services had been given in many of the schools in one category or another; however, this is a separate matter from the question of the reliability of the records. We have concluded that there is some basis for using the MSSRs to compare the services of different schools, or between categories of students across the schools, but that they will discriminate most reliably between students within the schools.

Total Average Frequency of Services Per Student

The statistic that is reported in Table 4-1 is the average number of services per student for the total year in each category of services recorded on the MSSR. Table 4-1 provides these statistics for the total population of targeted students and for the students in each school. The n's are the numbers of students for whom MSSRs were submitted for at least three months during the 1987-88 school year.

The largest numbers of services recorded were Telephone (7.7 per student for the year) and Mail (7.1), which added together with Auto Dialer calls accounted for about 38% of all services. The next largest category was Extended Day (5.4), followed by Individual Student Guidance (4.5), Home Visit (4.0), Student Conference (3.6), and Group Guidance (3.2). Attendance Incentive (1.9) accounted for relatively few services, while in a very low range were High School Linkage (0.7), Parent Guidance (0.5), Health Record (0.4), Vision Screening (0.2), Hearing Screening (0.2), and Physical Examination (0.03).

One would expect relatively few health services, simply because one health record check, physical examination, vision screening, and hearing screening might suffice for a student in one year or even less than a year. On the other hand, the numbers here imply that the average student was likely not to get a health service. As Chapter 3 pointed out, there were fewer health services than DPP staff felt there should be, and not all health services given to targeted students in school were necessarily recorded on the MSSR.

The average number of High School Linkage services recorded was patently lower than what would be necessary to help students

TABLE 4-1

Total Program Services Recorded on MSSR Forms in 1987-88
DPP Middle Schools, 1987-88

School	(N)	Total Indirect Services	Mail Contact	Phone Calls	Auto Dialer	Home Visits	Health Record Review
OVERALL	(4752)	20.08	7.08	7.69	0.92	4.02	0.36
14	(215)	7.66	0.10	2.60	2.47	2.40	0.08
15	(196)	15.06	2.88	9.02	0.04	3.13	0.00
16	(104)	15.72	0.14	10.41	0.04	5.13	0.00
17	(140)	27.39	7.96	14.19	0.02	5.01	0.21
18	(186)	22.74	12.06	4.14	0.05	5.60	0.89
19	(108)	22.75	9.24	8.31	0.17	4.65	0.39
20	(188)	21.49	10.10	2.38	0.02	8.45	0.55
21	(167)	40.80	6.46	14.01	17.67	2.67	0.00
22	(128)	22.55	4.72	16.58	0.04	1.08	0.13
23	(129)	24.92	5.39	15.84	0.05	3.47	0.17
24	(173)	9.55	2.62	3.53	0.04	3.14	0.21
25	(181)	26.30	17.43	4.23	0.07	4.34	0.23
26	(241)	12.16	1.72	8.60	0.05	1.79	0.00
27	(110)	33.73	14.74	11.80	0.06	1.34	5.79
28	(174)	24.51	8.41	13.76	0.26	1.97	0.11
29	(177)	14.41	2.33	7.03	0.01	5.05	0.00
30	(109)	19.85	5.44	7.66	2.61	3.50	0.63
31	(215)	23.95	17.27	2.07	0.01	4.38	0.21
32	(119)	19.12	1.70	7.50	0.20	9.71	0.01
33	(186)	26.23	11.69	9.52	0.03	4.10	0.90
34	(156)	18.25	8.29	6.47	0.02	3.47	0.00
35	(181)	21.56	5.12	12.72	0.00	2.83	0.89
36	(241)	27.59	20.87	3.10	0.11	3.26	0.24
37	(142)	15.41	3.54	6.27	1.68	3.51	0.42
38	(174)	11.11	0.11	3.86	0.05	6.91	0.17
39	(175)	15.58	4.06	6.23	0.81	4.47	0.00
40	(120)	20.69	8.04	11.43	0.03	1.19	0.00
41	(208)	10.06	2.75	2.69	0.04	4.58	0.00
42	(109)	23.20	1.71	14.17	0.07	7.26	0.00

(continued on next page)

Table 4-1, cont'd.

School	(N)	Total Direct Services	Parent Conference	Student Conference	Individ. Guidance	Group Guidance	Parent Guidance
OVERALL	(4752)	20.70	0.49	3.63	4.46	3.16	0.55
14	(215)	27.44	0.34	0.27	2.96	3.16	0.40
15	(196)	21.52	0.21	0.11	1.07	2.51	0.53
16	(104)	41.82	0.63	13.96	6.80	3.50	0.40
17	(140)	18.21	0.30	0.16	10.14	3.61	0.16
18	(186)	13.97	0.54	1.33	2.33	3.15	0.53
19	(108)	17.66	1.03	0.29	5.38	2.96	0.37
20	(188)	16.32	1.36	7.89	2.20	2.09	0.24
21	(167)	14.57	0.81	6.43	0.00	0.00	0.00
22	(128)	23.60	1.04	9.57	5.02	1.41	0.91
23	(129)	13.48	0.47	1.40	4.55	2.67	0.24
24	(173)	8.59	0.17	0.88	2.59	3.59	0.20
25	(181)	51.99	0.27	7.09	6.22	8.61	0.30
26	(241)	13.73	0.31	1.05	3.98	4.97	0.11
27	(110)	32.57	0.13	10.85	5.10	3.49	1.56
28	(174)	15.14	0.25	3.30	1.30	0.40	0.25
29	(177)	4.31	0.84	0.53	0.56	0.56	0.01
30	(109)	29.80	0.11	0.02	10.79	8.72	0.61
31	(215)	11.36	0.20	3.91	1.21	2.08	0.11
32	(119)	33.36	1.03	5.48	12.30	2.76	1.20
33	(186)	27.24	0.08	6.48	6.76	5.75	0.33
34	(156)	25.12	0.13	0.22	3.26	7.85	0.19
35	(181)	15.96	0.07	1.85	5.65	0.66	0.33
36	(241)	12.14	0.15	0.36	3.00	4.43	0.29
37	(142)	20.23	0.29	0.18	7.96	3.40	1.49
38	(174)	9.45	1.59	1.07	3.45	0.88	1.21
39	(175)	10.21	0.79	1.13	1.82	0.67	0.18
40	(120)	48.74	0.21	29.30	7.13	2.58	1.91
41	(208)	27.49	0.66	0.48	10.02	3.49	2.46
42	(109)	28.13	0.69	6.83	6.72	2.11	0.36

(continued on next page)

Table 4-1, cont'd.

School	Attendance Incentives	Extended Day Program	High School Linkage	Physical Exam	Vision Screening	Hearing Screening
OVERALL	1.84	5.40	0.71	0.03	0.22	0.21
14	2.43	16.63	0.37	0.00	0.44	0.44
15	0.38	16.29	0.42	0.00	0.00	0.00
16	0.63	14.88	1.00	0.00	0.00	0.00
17	0.32	2.74	0.75	0.03	0.00	0.00
18	2.78	0.80	0.35	0.26	0.98	0.93
19	3.66	2.53	1.16	0.21	0.06	0.02
20	2.47	0.04	0.04	0.01	0.00	0.00
21	0.74	5.46	0.27	0.00	0.57	0.29
22	2.01	2.20	0.38	0.00	0.53	0.53
23	2.02	1.19	0.79	0.02	0.12	0.01
24	0.92	0.00	0.23	0.00	0.00	0.00
25	6.61	18.14	3.71	0.03	0.50	0.51
26	1.79	0.98	0.55	0.00	0.00	0.00
27	2.55	8.37	0.53	0.00	0.00	0.00
28	1.90	6.11	0.25	0.01	0.68	0.68
29	1.80	0.01	0.00	0.00	0.00	0.00
30	2.59	5.50	1.09	0.35	0.02	0.00
31	1.30	0.45	1.93	0.00	0.09	0.09
32	0.89	9.24	0.45	0.00	0.00	0.00
33	0.02	7.38	0.32	0.03	0.07	0.03
34	5.06	8.11	0.29	0.00	0.00	0.00
35	1.72	2.30	2.06	0.03	0.65	0.64
36	2.44	0.19	0.76	0.00	0.16	0.36
37	2.23	3.85	0.70	0.00	0.06	0.07
38	0.60	0.00	0.29	0.01	0.17	0.18
39	0.00	3.99	0.13	0.00	0.74	0.74
40	1.56	5.06	0.98	0.01	0.00	0.00
41	1.30	8.74	0.35	0.00	0.00	0.00
42	0.68	10.15	0.61	0.00	0.00	0.00

"form connections with the high schools they will attend" (Circular #37). But how much greater a number would be appropriate is a somewhat empirical question which could only be answered by having the schools experiment with different strategies.

The average number of group guidance sessions is insufficient if one takes as a standard the number that a student would need to experience to benefit from a developmental group process, say at least six. If we use OSP's formula for the number of group guidance sessions to be conducted by a full-time counselor or equivalent, about 12 sessions per student would be expected. But again what is optimal becomes an empirical question. It is also important to consider the distribution of the sessions, specifically whether some students have a more extended group guidance experience than others. Table 4-5 (below) shows that somewhat more than a fifth of the students participated in 6 to 27 group guidance sessions. It is also the case that about a fifth of the students had between 6 and 27 extended days. A program might have a strategy in which some students received more extensive group guidance, others participated more frequently in extended days, etc. The DPP has not so far provided a framework in which to look for such a strategy.

Whether or not the average numbers of individual guidance sessions and student conferences recorded are what they should be is a still more open question, as is the matter of how many attendance outreach services of one kind or another were recorded. We shall not comment further on what numbers of services might or might not be appropriate, but will proceed to disclosing more fully the various factors that influenced how many services were recorded for different categories of students in different school situations.

Though we do not have a guideline from which to look for a sophisticated strategy for the distribution of services, we have made a simpler calculation. "Direct services" is the sum of the services that involve direct contact with a student: parent conference (in which a student is often present), student conference, individual guidance, group guidance, parent guidance, attendance incentive, extended day, high school linkage, physical examination, vision screening, and hearing screening. "Indirect services" is the sum of the services that usually do not involve direct contact with the student: mail, telephone, auto dialer, home visit, and health records check. The average student received a total of 20.7 direct services in 1987-88 and 20.1 indirect services. As various analyses below will reveal, some students received many more or fewer of these services than did others.

School-Level Variations in Services

From Table 4-1 it can it be seen that individual schools varied greatly in the numbers of services recorded for the average targeted student. For Indirect Services, the range extended from 7.7 per student in School 14 to 40.8 per student in School 21. For Direct Services, the range was from 4.3 in School 29 to 52.0 in School 25. Furthermore, large standard deviations--which in many schools were close to the means themselves--indicate that there were substantial differences in the numbers of services recorded for individual students within the schools. (Statistics not shown.)

Anticipating the analysis that will be presented in Chapter 5, we can state that there was no correlation between the frequencies of services schools reported in various categories and the magnitude of changes in outcome variables. Schools that gained in courses passed (comparing 1987-88 to 1986-87) were just as likely to have recorded low as high frequencies of direct or indirect services. Schools that lost the most in attendance included some schools where relatively high and others where relatively low services were recorded. The functions of our reporting the levels of service in each school, then, are (1) to demonstrate that the recorded levels of service have been taken into account in the analysis and (2) to provide statistics that may have more meaning to individual schools, or districts and CBO's, as each entity attempts to come to grips with how it has been distributing its effort and how this distribution might have related to outcomes.

Service Averages by School in Each Season

Table 4-2A summarizes subtotals of services for three seasons: Fall (September through December); Winter (January through March); and Spring (April through June). While there are more months in the first season, this is somewhat compensated for by the fact that the targeting of students was still taking place in September, and indeed later in the fall, in many schools. The total n for all three seasons is the same, 4752, the number of students for whom MSSRs were submitted for at least three months during the 1987-88 school year.

Table 4-2A shows that all of the attendance outreach services reached their highest level in the Winter season, between January and March. Student conferences and extended days also peaked during these months. Individual, group, and parent guidance, on the other hand, declined from Fall to Winter and again from Winter to Spring. This decline might reflect OSP's enforcing standards for what could be counted as a guidance session after the Fall season, while the decline between Winter and Spring is consistent with the general pattern. High school

TABLE 4-2A

Average Number of DPP Services per Student for Seasons and Total 1987-88 School Year DPP Middle Schools, 1987-88

	Sep-Dec	Jan-Mar	Apr-Jun	Total Year
Indirect Services	6.1	8.1	5.9	20.1
Mail	2.1	2.9	2.1	7.1
Telephone	2.3	3.1	2.3	7.7
Auto Dialer	0.3	0.4	0.2	0.9
Home Visits	1.3	1.5	1.2	4.0
Health Record	0.1	0.1	0.2	0.4
Direct Services	6.8	7.7	6.2	20.7
Parent Conferences	0.2	0.2	0.1	0.5
Student Conferences	1.1	1.5	1.0	3.6
Individual Guidance	1.7	1.5	1.2	4.5
Group Guidance	1.5	1.0	0.7	3.2
Parent Guidance	0.2	0.2	0.1	0.5
Attendance Incentives	0.4	0.6	0.9	1.8
Extended Days	1.2	2.4	1.8	5.4
High School Linkages	0.1	0.3	0.3	0.7
Physical Examinations	0.01	0.01	0.02	0.03
Vision Screening	0.1	0.1	0.1	0.2
Hearing Screening	0.1	0.1	0.1	0.2

linkage, by contrast, was higher in both Winter and Spring than in the Fall. Attendance incentives increased from Fall to Winter and again from Winter to Spring.

Overall, the total of Direct Services was highest in the Winter season and lowest in the Spring. The same observation applies to the total of Indirect Services.

For individual schools, there were marked variations in these patterns. (Table 4-2B.) Home visiting in School 24, for example, increased steadily from 0.58 per student in Fall to 1.02 in Winter and 1.54 in Spring; while in School 29, home visiting decreased from 2.30 in Fall to 1.84 in Winter and 0.91 in Spring. Although individual guidance was recorded most frequently in the Fall in the schools overall, in eleven schools it was recorded most often in the Winter and in three the highest average frequency was recorded in the Spring.

Total and Seasonal Average Services per Student by District

Variations by district give some indication of the relative priorities the districts, in four cases associated with CBO's, gave to the delivery-and-recording of the different categories of services. Table 4-3 shows the following:

District 17 recorded far the highest average number of mailings per student, while District 15 recorded the highest average number of phone calls and District 14 recorded the most frequent use of auto dialers. Home visits were recorded most frequently in Districts 3 and 32. Health reviews were recorded most often in District 15. The totals of indirect services were relatively high in Districts 14, 15, 17, and 10.

Parent conferences were reported most often per student in District 32, student conferences in District 15, individual guidance sessions in Districts 3 and 19, group guidance in District 9, and parent guidance in District 15. Districts 9 and 19 awarded the most attendance incentives per student, Districts 7 and 3 recorded the greatest use of extended days, District 9 recorded the most high school linkages per student, District 19 recorded the most physical exams, and District 14 recorded the most vision and hearing screenings. The totals of direct services recorded were highest in Districts 15 and 3.

These numbers do not speak to the quality of the services offered in the districts or their schools, nor to the selectivity or the appropriateness of how the services were distributed among students. Our field observations suggest that it is simply not possible to infer quality from quantity. Some perspective will be thrown on selectivity in subsequent analyses of which students received greater or lesser proportions of the recorded services.

TABLE 4-2B

Seasonal Sub-Totals of Services Recorded on MSSR Forms, 1987-88
DPP Middle Schools, 1987-88

		TOTAL INDIRECT SVCS			MAIL CONTACT			PHONE CALLS			AUTO DIALER			HOME VISITS			HEALTH RECORD REVIEW		
School Code	(N)	Sept.-Dec.	Jan.-Mar.	Apr.-June	Sep.-Dec.	Jan.-Mar.	Apr. June	Sep.-Dec.	Jan.-Mar.	Apr.-June	Sep.-Dec.	Jan.-Mar.	Apr.-June	Sep.-Dec.	Jan.-Mar.	Apr.-June	Sep.-Dec.	Jan.-Mar.	Apr.-June
OVERALL	(4752)	6.06	8.10	5.91	2.08	2.92	2.07	2.26	3.14	2.28	0.34	0.37	0.21	1.30	1.52	1.20	0.07	0.14	0.15
14	(215)	2.77	3.52	1.38	0.08	0.00	0.02	1.00	0.98	0.61	0.64	1.56	0.28	0.96	0.98	0.47	0.08	0.00	0.00
15	(196)	3.08	7.61	4.37	0.72	1.09	1.08	1.66	4.93	2.42	0.00	0.03	0.01	0.69	1.56	0.87	0.00	0.00	0.00
16	(104)	5.41	6.42	3.88	0.08	0.03	0.04	3.24	4.65	2.52	0.01	0.00	0.03	2.09	1.74	1.30	0.00	0.00	0.00
17	(140)	8.34	10.22	8.84	2.39	3.21	2.36	4.14	4.91	5.14	0.01	0.00	0.01	1.80	1.89	1.33	0.00	0.21	0.00
18	(186)	5.92	9.64	7.18	3.84	5.06	3.15	0.57	2.08	1.49	0.03	0.02	0.01	1.47	2.48	1.64	0.00	0.00	0.89
19	(108)	11.12	7.44	4.19	4.74	3.02	1.48	4.19	2.52	1.59	0.06	0.10	0.00	2.06	1.56	1.04	0.06	0.24	0.08
20	(188)	6.22	8.13	7.14	3.45	3.18	3.46	0.67	1.01	0.70	0.00	0.02	0.00	2.10	3.46	2.89	0.00	0.46	0.09
21	(167)	14.45	13.92	12.43	2.11	2.42	1.93	4.78	4.69	4.53	6.23	6.57	4.86	1.33	0.23	1.11	0.00	0.00	0.00
22	(128)	6.60	8.23	7.71	0.42	1.87	2.43	5.76	5.95	4.88	0.02	0.01	0.02	0.27	0.41	0.39	0.13	0.00	0.00
23	(129)	4.02	9.50	11.40	0.85	2.26	2.27	2.59	5.98	7.27	0.01	0.00	0.05	0.40	1.26	1.81	0.17	0.00	0.00
24	(173)	2.51	3.31	3.73	0.91	0.68	1.03	0.81	1.57	1.15	0.00	0.03	0.01	0.58	1.02	1.54	0.21	0.00	0.00
25	(181)	9.41	10.18	6.71	4.70	7.52	5.20	2.84	1.01	0.38	0.07	0.00	0.01	1.81	1.42	1.12	0.00	0.23	0.00
26	(241)	2.30	5.68	4.17	0.34	1.25	0.12	1.65	3.86	3.10	0.01	0.03	0.00	0.30	0.54	0.95	0.00	0.00	0.00
27	(110)	7.40	16.34	9.99	2.94	7.65	4.15	3.54	5.41	2.85	0.00	0.02	0.05	0.51	0.47	0.35	0.42	2.79	2.58
28	(174)	8.06	9.68	6.77	2.29	3.89	2.22	4.34	5.18	4.24	0.25	0.02	0.00	1.09	0.56	0.31	0.09	0.02	0.00
29	(177)	4.79	5.95	3.67	0.80	1.30	0.23	1.68	2.82	2.53	0.01	0.00	0.00	2.30	1.84	0.91	0.00	0.00	0.00
30	(109)	4.74	9.31	5.80	0.83	2.68	1.94	2.57	3.37	1.72	0.48	1.34	0.80	0.59	1.81	1.11	0.28	0.12	0.23
31	(215)	6.19	10.52	7.24	4.87	7.42	4.99	0.36	1.28	0.43	0.00	0.01	0.00	0.91	1.75	1.72	0.05	0.06	0.11
32	(119)	8.75	5.69	4.68	0.75	0.38	0.57	3.30	2.40	1.80	0.08	0.06	0.07	4.61	2.86	2.24	0.01	0.00	0.00
33	(186)	6.08	11.98	8.18	2.88	5.67	3.14	2.02	4.04	3.45	0.01	0.02	0.01	0.89	1.87	1.34	0.28	0.38	0.24
34	(156)	5.02	7.52	5.71	2.47	3.12	2.71	1.76	2.73	1.98	0.00	0.02	0.00	0.79	1.65	1.03	0.00	0.00	0.00
35	(181)	7.91	8.23	5.43	1.15	2.19	1.78	5.43	5.23	2.07	0.00	0.00	0.00	1.22	0.81	0.81	0.12	0.00	0.77
36	(241)	8.99	11.16	7.43	7.41	8.05	5.40	0.46	1.71	0.93	0.04	0.05	0.02	0.83	1.35	1.08	0.24	0.00	0.00
37	(142)	4.17	6.37	4.87	0.92	1.43	1.18	1.08	2.45	2.73	0.95	0.70	0.03	1.21	1.54	0.76	0.00	0.25	0.17
38	(174)	3.78	4.63	2.70	0.01	0.04	0.06	1.31	1.93	0.62	0.03	0.00	0.02	2.42	2.49	2.01	0.00	0.17	0.00
39	(175)	5.75	5.18	4.65	1.90	1.07	1.09	1.89	2.22	2.12	0.77	0.01	0.02	1.18	1.88	1.41	0.00	0.00	0.00
40	(120)	5.46	9.08	6.15	2.05	3.15	2.84	3.18	5.31	2.94	0.00	0.01	0.02	0.23	0.62	0.35	0.00	0.00	0.00
41	(208)	3.16	4.24	2.66	0.67	1.13	0.96	0.83	1.24	0.63	0.02	0.01	0.01	1.65	1.87	1.07	0.00	0.00	0.00
42	(109)	8.36	8.91	5.94	0.62	0.76	0.32	4.52	5.63	4.01	0.04	0.03	0.01	3.17	2.49	1.60	0.00	0.00	0.00

Table 4-2b, cont'd.

School Code	(N)	TOTAL DIRECT SVCS. Sept.-Dec.	TOTAL DIRECT SVCS. Jan.-Mar.	TOTAL DIRECT SVCS. Apr.-June	PARENT CONFERENCE Sep.-Dec.	PARENT CONFERENCE Jan.-Mar.	PARENT CONFERENCE Apr. June	STUDENT CONFERENCE Sep.-Dec.	STUDENT CONFERENCE Jan.-Mar.	STUDENT CONFERENCE Apr.-June	INDIVIDUAL GUIDANCE Sep.-Dec.	INDIVIDUAL GUIDANCE Jan.-Mar.	INDIVIDUAL GUIDANCE Apr.-June	GROUP GUIDANCE Sep.-Dec.	GROUP GUIDANCE Jan.-Mar.	GROUP GUIDANCE Apr.-June	PARENT GUIDANCE Sep.-Dec.	PARENT GUIDANCE Jan.-Mar.	PARENT GUIDANCE Apr.-June
OVERALL	(4752)	6.78	7.72	6.20	0.21	0.18	0.10	1.15	1.51	0.97	1.74	1.47	1.24	1.47	0.99	0.70	0.24	0.18	0.12
14	(215)	5.84	10.83	10.77	0.04	0.15	0.14	0.08	0.09	0.09	0.70	1.28	0.98	0.77	1.21	1.17	0.06	0.27	0.07
15	(196)	6.29	8.92	6.31	0.04	0.10	0.07	0.02	0.09	0.01	1.07	0.00	0.00	2.51	0.00	0.00	0.53	0.00	0.00
16	(104)	12.63	15.85	13.35	0.34	0.18	0.12	4.42	5.88	3.66	2.83	2.37	1.61	1.01	1.83	0.66	0.13	0.14	0.13
17	(140)	6.79	6.27	5.14	0.13	0.10	0.07	0.11	0.04	0.00	3.60	3.69	2.86	2.50	0.86	0.26	0.11	0.04	0.01
18	(186)	2.92	4.06	6.99	0.17	0.15	0.23	0.24	0.62	0.47	0.63	1.24	0.46	1.09	0.82	1.24	0.14	0.19	0.20
19	(108)	4.70	8.07	4.88	0.34	0.41	0.28	0.03	0.19	0.07	1.53	2.94	0.92	1.32	1.64	0.00	0.07	0.20	0.09
20	(188)	5.62	4.88	5.82	0.70	0.47	0.19	4.32	2.23	1.34	0.02	0.78	1.40	0.01	0.61	1.47	0.00	0.17	0.07
21	(167)	3.74	4.60	6.23	0.23	0.32	0.26	1.80	2.44	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	(128)	9.93	7.41	6.26	0.41	0.37	0.26	5.48	2.96	1.13	1.84	1.62	1.57	0.46	0.11	0.84	0.37	0.30	0.24
23	(129)	5.06	4.95	3.47	0.12	0.26	0.09	0.24	0.83	0.33	1.77	1.25	1.53	1.46	0.47	0.74	0.04	0.06	0.14
24	(173)	2.64	3.55	2.40	0.02	0.13	0.02	0.09	0.33	0.46	0.71	1.22	0.66	1.64	1.35	0.60	0.09	0.07	0.04
25	(181)	17.88	21.88	12.23	0.13	0.11	0.03	0.88	3.90	2.30	3.64	1.58	1.00	6.62	0.94	1.06	0.07	0.12	0.11
26	(241)	4.93	3.99	4.81	0.06	0.07	0.18	0.21	0.56	0.29	1.10	0.95	1.92	2.34	1.15	1.49	0.06	0.05	0.00
27	(110)	14.05	11.75	6.77	0.10	0.02	0.01	3.76	4.47	2.61	3.15	1.31	0.65	1.95	1.46	0.07	0.55	0.61	0.40
28	(174)	4.98	4.99	5.17	0.17	0.05	0.03	2.80	0.28	0.22	0.30	0.33	0.67	0.11	0.04	0.25	0.03	0.03	0.20
29	(177)	2.44	0.76	1.11	0.40	0.35	0.09	0.42	0.09	0.01	0.53	0.02	0.02	0.54	0.02	0.01	0.01	0.00	0.00
30	(109)	14.27	10.69	4.84	0.02	0.06	0.03	0.00	0.00	0.02	5.45	3.63	1.71	4.47	3.45	0.80	0.20	0.06	0.36
31	(215)	2.03	4.74	4.59	0.05	0.11	0.04	0.49	1.26	2.16	0.26	0.67	0.28	0.64	1.08	0.36	0.01	0.08	0.01
32	(119)	11.75	11.69	9.92	0.51	0.27	0.25	1.49	2.35	1.64	4.13	4.08	4.09	0.82	1.18	0.76	0.51	0.27	0.42
33	(186)	5.92	11.46	9.87	0.04	0.03	0.01	0.12	3.60	2.76	1.88	2.61	2.27	2.18	1.92	1.65	0.19	0.15	0.00
34	(156)	6.88	10.29	7.96	0.02	0.12	0.00	0.10	0.13	0.00	1.22	1.25	0.79	2.37	3.15	2.33	0.06	0.10	0.03
35	(181)	5.00	5.58	5.38	0.01	0.03	0.03	0.78	0.73	0.33	1.31	1.89	2.45	0.39	0.10	0.18	0.17	0.12	0.04
36	(241)	2.78	4.68	4.68	0.07	0.05	0.03	0.17	0.07	0.12	0.65	0.97	1.39	1.24	2.37	0.82	0.10	0.12	0.06
37	(142)	7.35	8.24	4.64	0.17	0.11	0.01	0.03	0.14	0.01	2.73	3.15	2.08	1.21	1.56	0.63	0.38	0.65	0.46
38	(174)	3.06	4.10	2.29	0.61	0.68	0.29	0.36	0.39	0.33	1.21	1.52	0.72	0.20	0.43	0.25	0.47	0.44	0.30
39	(175)	2.67	4.62	2.92	0.35	0.33	0.11	0.44	0.53	0.17	0.23	0.86	0.72	0.10	0.35	0.22	0.03	0.11	0.03
40	(120)	16.78	20.69	11.27	0.19	0.02	0.00	7.61	14.21	7.48	4.58	1.72	0.83	1.73	0.78	0.07	0.68	0.95	0.28
41	(208)	13.71	8.03	5.75	0.57	0.08	0.01	0.06	0.41	0.00	6.34	1.99	1.69	2.61	0.34	0.54	1.94	0.30	0.21
42	(109)	9.29	9.80	9.04	0.18	0.30	0.20	2.61	2.59	1.62	2.37	1.82	2.53	0.63	0.70	0.78	0.05	0.20	0.11

Table 4-2b, cont'd.

School Code	ATTENDANCE INCENTIVES			EXTENDED DAY PROG.			HIGH SCHOOL LINKAGE			PHYSICAL EXAM			VISION SCREENING			HEARING SCREENING		
	Sept.-Dec.	Jan.-Mar.	Apr.-June	Sep.-Dec.	Jan.-Mar.	Apr. June	Sep.-Dec.	Jan.-Mar.	Apr.-June	Sep.-Dec.	Jan.-Mar.	Apr.-June	Sep.-Dec.	Jan.-Mar.	Apr.-June	Sep.-Dec.	Jan.-Mar.	Apr.-June
OVERALL	0.43	0.56	0.86	1.17	2.42	1.81	0.15	0.28	0.28	0.01	0.01	0.02	0.11	0.06	0.05	0.11	0.05	0.05
14	0.13	0.51	1.80	3.18	7.31	6.14	0.00	0.00	0.37	0.00	0.00	0.00	0.44	0.00	0.00	0.44	0.00	0.00
15	0.36	0.03	0.00	1.77	8.46	6.06	0.00	0.25	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.24	0.27	0.13	3.32	5.02	6.55	0.34	0.16	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.16	0.14	0.01	0.18	1.04	1.52	0.00	0.34	0.41	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.66	0.64	1.48	0.01	0.19	0.60	0.00	0.22	0.14	0.00	0.00	0.26	0.00	0.00	0.98	0.00	0.00	0.93
19	0.63	1.22	1.81	0.00	1.20	1.32	0.70	0.06	0.39	0.06	0.15	0.00	0.00	0.06	0.00	0.01	0.01	0.00
20	0.58	0.57	1.32	0.00	0.02	0.02	0.00	0.03	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.74	0.81	1.84	2.80	0.03	0.00	0.24	0.00	0.00	0.00	0.57	0.00	0.00	0.29	0.00	0.00
22	0.51	0.93	0.57	0.87	0.77	0.56	0.00	0.36	0.02	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.53
23	0.97	0.81	0.23	0.33	0.78	0.09	0.00	0.49	0.30	0.02	0.00	0.00	0.12	0.00	0.00	0.01	0.00	0.00
24	0.08	0.22	0.62	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	1.99	2.36	2.26	3.91	9.51	4.72	0.65	2.31	0.75	0.00	0.03	0.00	0.00	0.50	0.00	0.00	0.51	0.00
26	0.92	0.46	0.41	0.24	0.36	0.37	0.00	0.39	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.75	1.16	0.64	3.59	2.47	2.31	0.19	0.25	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.17	0.55	1.18	0.02	3.55	2.55	0.00	0.17	0.08	0.01	0.00	0.00	0.68	0.00	0.00	0.68	0.00	0.00
29	0.54	0.28	0.97	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.46	0.97	1.16	3.16	2.35	0.00	0.39	0.11	0.60	0.13	0.05	0.17	0.00	0.01	0.01	0.00	0.00	0.00
31	0.40	0.39	0.51	0.00	0.22	0.23	0.00	0.93	0.99	0.00	0.00	0.00	0.09	0.00	0.00	0.09	0.00	0.00
32	0.28	0.08	0.53	3.99	3.24	2.02	0.03	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	0.00	0.01	0.01	1.37	3.04	2.97	0.11	0.00	0.20	0.03	0.00	0.00	0.01	0.06	0.00	0.00	0.03	0.00
34	1.52	1.71	1.83	1.58	3.84	2.69	0.01	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	0.08	0.42	1.23	0.42	0.81	1.07	1.84	0.19	0.03	0.00	0.01	0.03	0.00	0.65	0.00	0.00	0.64	0.00
36	0.04	1.05	1.36	0.00	0.05	0.14	0.00	0.00	0.76	0.00	0.00	0.00	0.16	0.00	0.00	0.36	0.00	0.00
37	0.57	0.72	0.94	2.01	1.59	0.25	0.25	0.20	0.25	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.07	0.00
38	0.22	0.25	0.13	0.00	0.00	0.00	0.00	0.03	0.26	0.00	0.01	0.00	0.00	0.17	0.00	0.00	0.18	0.00
39	0.00	0.00	0.00	0.03	2.30	1.67	0.00	0.13	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.74	0.00	0.00
40	0.29	0.63	0.63	1.69	1.90	1.47	0.00	0.48	0.50	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
41	0.00	0.00	1.30	2.19	4.77	1.78	0.00	0.13	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	0.17	0.33	0.18	3.18	3.56	3.40	0.10	0.30	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 4-3

Total Program Services Reported on MSSR Forms,
by Model and District
DPP Middle Schools, 1987-88

District	(N)	Total Indirect Services	Mail Contact	Phone Calls	Auto Dialer	Home Visits	Health Record Review
OVERALL	(4752)	20.08	7.08	7.69	0.92	4.02	0.36
School-Alone Model	(3333)	20.08	8.05	6.44	1.13	4.19	0.26
7	(567)	13.12	3.32	5.88	0.96	2.94	0.03
9	(562)	15.13	7.44	3.45	0.05	4.06	0.14
10	(507)	24.88	8.32	11.95	0.02	3.91	0.70
14	(516)	26.76	6.30	11.28	6.08	3.04	0.04
17	(642)	24.97	17.12	3.05	0.06	4.32	0.43
32	(539)	15.82	4.32	4.39	0.03	6.84	0.25
CBO/School Model	(1419)	20.07	4.79	10.61	0.43	3.64	0.60
3	(332)	19.40	1.21	10.60	0.11	7.47	0
15	(358)	25.36	8.91	13.39	0.05	1.20	1.83
19	(359)	18.96	5.83	7.30	1.50	3.86	0.48
27	(370)	16.60	3.00	11.13	0.05	2.38	0.06

(continued on next page)

Table 4-3, cont'd.

District	(N)	Total Direct Services	Parent Conference	Student Conference	Individ. Guidance	Group Guidance	Parent Guidance
OVERALL	(4752)	20.70	0.49	3.63	4.45	3.16	0.54
School-Alone Model	(3333)	18.44	0.48	2.40	3.54	2.98	0.45
7	(567)	24.75	0.25	0.21	2.39	4.23	0.38
9	(562)	29.57	0.39	2.72	8.51	5.17	1.07
10	(507)	20.72	0.13	3.08	7.30	3.35	0.28
14	(516)	13.28	0.61	3.57	1.06	0.36	0.15
17	(642)	12.41	0.28	1.83	2.21	3.27	0.30
32	(539)	10.16	1.26	3.27	2.07	1.20	0.48
CBO/School Model	(1419)	26.01	0.52	6.54	6.62	3.59	0.79
3	(332)	34.29	0.79	8.58	8.74	2.79	0.68
15	(358)	34.79	0.48	16.58	5.76	2.45	1.44
19	(359)	22.35	0.46	0.16	8.04	4.88	0.88
27	(370)	13.65	0.37	1.17	4.18	4.17	0.15

(Direct Services, continued)

District	Attendance Incentives	Extended Day Program	High School Linkage	Physical Exam	Vision Screening	Hearing Screening
OVERALL	1.85	5.40	0.71	0.04	0.22	0.21
School-Alone Model	1.83	5.48	0.71	0.02	0.07	0.06
7	2.45	14.16	0.37	0	0.17	0.17
9	2.90	9.08	1.40	0.01	0.16	0.16
10	0.71	4.28	1.06	0.03	0.25	0.24
14	0.89	5.18	0.21	0	0.67	0.58
17	2.16	0.45	1.04	0.08	0.37	0.43
32	1.64	0.02	0.11	0	0.06	0.06
CBO/School Model	1.87	5.20	0.72	0.05	0.28	0.27
3	0.74	11.31	0.68	0	0	0
15	2.02	5.05	0.63	0	0.19	0.19
19	2.77	3.95	0.96	0.17	0.04	0.03
27	1.88	1.06	0.63	0.01	0.04	0

Total and Seasonal Average Services per Student by Model

Table 4-3 also displays the average number of services per student reported for the School Alone and the Community Based Organization models respectively. The School Alone model made more use of mail services and autodialers, while the CBO schools recorded more telephone calls. Home visits per student were somewhat higher in the School Alone model and health reviews were higher in the CBO model. Altogether, the average number of indirect services per student was the same in the School Alone model (20.1) and the CBO model (20.1).

Student conferences, individual guidance sessions, group guidance sessions, parent guidance, and vision and hearing screenings were all reported more frequently per student in the CBO model than in the SA model. Extended days were reported more often per student in the School Alone model. There were only slight differences between the models in parent conferences, attendance incentives, high school linkages, and physical exams per individual student. In total, the average number of direct services per student was higher in the CBO schools (26.0) than in the School Alone schools (18.4).

The reason for calculating the average number of services per student--overall or by school, district, or model--is that it is this average which is expected to correlate with average gain or loss in the outcome variables. However, the averages mask the fact that different schools or districts had different numbers of students enrolled in the program. The same number of services spread over a smaller number of students results in a smaller average than when the n of students is larger.

As explained in Chapter 2, the SA schools targeted an average of 185 students per school, while the CBO schools targeted an average of 129 students. Multiplying these numbers by the average frequencies of indirect services per student in the two models, one finds that the total number of indirect services recorded in the average SA school was 3722 and in the average CBO school was 2593. The fact that facilitators were employed only half time in the CBO schools particularly suggests that the difference in indirect services might reflect the level of activity of facilitators and staff assigned to them as much as that of CBO employees themselves.

Calculating in a similar way, one finds that the total number of direct services recorded in the average SA school was 3407 while the total in the average CBO school was 3354. Thus CBO model staff recorded about the same number of services in total per school as School Alone staff, although the average number recorded per student was higher in the CBO schools because

the number of students served was lower.

Levels of Service to Students

Table 4-4 shows for selected categories of service the proportions of students for whom different levels of services were recorded: 0 contacts, 1 contact, 2-5, 6-9, 10-18, 19-27, and 28 or more contacts, as applicable. This allows us to ask how the "average" number of services for students was in fact distributed over the total number of students in the program.

From the table we notice that 17% of all students received no phone calls--a number that is plausible in terms of the proportion of middle school students reporting on a survey in Year Two that they did not have a telephone at home (23%) or could not even be reached on a neighbor's phone (10%). Home visits were attempted at least once for 80% of the students, and for 28% of the students between six and more than 28 home visit attempts were recorded. No parent conferences were recorded for 72% of the students, and no parent guidance sessions were recorded for 74%; it is likely, however, that a smaller proportion of students received neither a parent conference nor a parent guidance session.

No student conferences were recorded for 44% of the targeted students. However, it is highly likely that contacts of this sort occurred more frequently than were recorded. Individual guidance sessions, which OSP defined more stringently, were not recorded for 24% of the students, while 30% were reported to have received between six and more than 28 individual guidance sessions. Group guidance was not recorded for 33% of the students, but was recorded for between six and 28+ sessions for 22%.

Attendance incentives were not recorded for 44% of the students and were indicated six or more times for 10%. Extended days were not recorded for 62% of the students, while 21% of the students were reported to have attended extended days between six and 28+ times. High school linkage contacts were not recorded for 69% of the students and were recorded two or more times for 16%. No health record reviews were recorded for 78% of the students.

Because of the larger numbers involved, a different set of service levels was defined to examine the distributions of total direct and total indirect services. In Table 4-5, one sees that 18.7% of the students were recorded as receiving from 0 to 4 direct services during the entire year, while 28.3% received between 25 and more than 41 direct services. A smaller proportion of students, 13.9%, received between 0 and 4 indirect services during the year, and a somewhat larger fraction, 30.7%,

TABLE 4-4

Proportions of Students Receiving Different Levels of Services
DPP Middle Schools, 1987-88

Telephone

	Number of Students	Percent of Students	Cumulative Percent
0 contacts	809	17.0	17.0
1 contact	468	9.8	26.9
2-5 contacts	1262	26.6	53.4
6-9 contacts	792	16.7	70.1
10-18 contacts	900	18.9	89.0
19-27 contacts	342	7.2	96.2
28 or more contacts	179	3.8	100.0

Home visits

	Number of Students	Percent of Students	Cumulative Percent
0 contacts	951	20.0	20.0
1 contact	650	13.7	33.7
2-5 contacts	1803	37.9	71.6
6-9 contacts	904	19.0	90.7
10-18 contacts	405	8.5	99.2
19-27 contacts	31	.7	99.8
28 or more contacts	8	.2	100.0

Parent conferences

	Number of Students	Percent of Students	Cumulative Percent
0 contacts	3419	71.9	71.9
1 contact	840	17.7	89.6
2-5 contacts	456	9.6	99.2
6-9 contacts	30	.6	99.9
10-18 contacts	7	.1	100.0

Table 4-4, cont'd.

Student conferences

	Number of Students	Percent of Students	Cumulative Percent
0 contacts	2099	44.2	44.2
1 contact	740	15.6	59.7
2-5 contacts	1037	21.8	81.6
6-9 contacts	434	9.1	90.7
10-18 contacts	247	5.2	95.9
19-27 contacts	95	2.0	97.9
28 or more contacts	100	2.1	100.0

Individual guidance

	Number of Students	Percent of Students	Cumulative Percent
0 contacts	1123	23.6	23.6
1 contact	605	12.7	36.4
2-5 contacts	1611	33.9	70.3
6-9 contacts	713	15.0	85.3
10-18 contacts	592	12.5	97.7
19-27 contacts	80	1.7	99.4
28 or more contacts	28	.6	100.0

Group guidance

	Number of Students	Percent of Students	Cumulative Percent
0 contacts	1555	32.7	32.7
1 contact	666	14.0	46.7
2-5 contacts	1473	31.0	77.7
6-9 contacts	712	15.0	92.7
10-18 contacts	324	6.8	99.5
19-27 contacts	21	.4	100.0
28 or more contacts	1	.0	100.0

Table 4-4, cont'd.

Parent guidance

	Number of Students	Percent of Students	Cumulative Percent
0 contacts	3506	73.8	73.8
1 contact	657	13.8	87.6
2-5 contacts	531	11.2	98.8
6-9 contacts	46	1.0	99.7
10-18 contacts	9	.2	99.9
19-27 contacts	3	.1	100.0

Attendance incentives

	Number of Students	Percent of Students	Cumulative Percent
0 contacts	2115	44.5	44.5
1 contact	833	17.5	62.0
2-5 contacts	1314	27.7	89.7
6-9 contacts	430	9.0	98.7
10-18 contacts	59	1.2	100.0
28 or more contacts	1	.0	100.0

Extended days

	Number of Students	Percent of Students	Cumulative Percent
0 contacts	2972	62.5	62.5
1 contact	305	6.4	69.0
2-5 contacts	478	10.1	79.0
6-9 contacts	240	5.1	84.1
10-18 contacts	301	6.3	90.4
19-27 contacts	139	2.9	93.3
28 or more contacts	317	6.7	100.0

Table 4-4, cont'd.

High school linkage

	Number of Students	Percent of Students	Cumulative Percent
0 contacts	3282	69.1	69.1
1 contact	703	14.8	83.9
2-5 contacts	704	14.8	98.7
6-9 contacts	54	1.1	99.8
10-18 contacts	9	.2	100.0

TABLE 4-5

Proportions of Students Receiving Different Levels of Total Indirect and Direct Services DPP Middle Schools, 1987-88

Indirect services

	Number of Students	Percent of Students	Cumulative Percent
0 contacts	198	4.2	4.2
1-4 contacts	459	9.7	13.8
5-9 contacts	664	14.0	27.8
10-15 contacts	880	18.5	46.3
16-24 contacts	1100	23.1	69.5
25-40 contacts	984	20.7	90.2
41 or more contacts	467	9.8	100.0

Direct services

	Number of Students	Percent of Students	Cumulative Percent
0 contacts	245	5.2	5.2
1-4 contacts	641	13.5	18.6
5-9 contacts	828	17.4	36.1
10-15 contacts	814	17.1	53.2
16-24 contacts	883	18.6	71.8
25-40 contacts	735	15.5	87.2
41 or more contacts	606	12.8	100.0

received from 25 to more than 41 indirect services.

What we are seeing here is a pattern in which some students received no services, others one or a few, and still others relatively high frequencies of services. These are fairly standard distributions from the standpoint of the numbers of students receiving various levels of service, but they are skewed in terms of the numbers of services themselves received by different students. A set of further calculations (not shown in tables) demonstrates that relatively small fractions of the students received a large share of one or another service. Thus about 22% of all of the students received approximately 65% of all group guidance services. Just 7% of the students were recorded as receiving 48% of all of the extended day services. Using our summary statistics, we find that about 25% of the students received 52% of all indirect services, and 25% were recorded as receiving 61% of all direct services.

How Program Affected the Distribution of Services

Chapter 3 discussed the implementation of remediation and enrichment classes for DPP students in 1987-88. Table 4-6 shows the average frequencies of direct and indirect services for students who were in a PCEN remediation course, a DPP enrichment course, both remediation and enrichment, or neither. It can be seen that students in any combination of these courses received more services than students who were in neither a remediation nor an enrichment course.

Table 4-6 also simplifies this matter by showing students as being in a cluster (remediation and/or enrichment) or not in a cluster. For 2601 students who were in a cluster, the average total of direct services recorded was 25.5; for 2151 students who were not in a cluster, the monthly average of direct services was 14.9. It will be seen in Chapter 5 that this can be accounted for to some extent by the fact that students in a cluster attended more days and were therefore present more days to receive direct services. Another factor, however, was that students could be found and pulled for direct services, particularly counseling, more readily if they were in a cluster than if they were not. This was specifically alluded to in the Pupil Personnel Committee meeting records of several schools, and their using the term "cluster" in conjunction with finding students seemed to indicate that it was a strategy that OSP had recommended to the schools more generally.

Table 4-6 shows that clustered students received an average total of 23.3 indirect services per month, while not-clustered students received an average total of 16.1 indirect services. It is more difficult to understand why clustered students would have received more attendance outreach, given again that their

TABLE 4-6

Average Total Direct and Indirect Services for Students in PCEN Remediation and/or DPP Enrichment Classes or Clustered*
DPP Middle Schools, 1987-88

Program	Average Total Indirect Services	Average Total Direct Services	Number Of Students
Neither PCEN nor enrichment	16.1	14.7	2187
PCEN remediation only	24.1	25.6	1797
DPP Enrichment only	23.6	24.6	545
Remediation and enrichment	17.6	31.2	223
Not clustered	16.1	14.9	2151
Clustered	23.3	25.5	2601

---

*Clustered includes 2565 students who were in PCEN remediation and/or DPP enrichment classes and an additional 36 students (in one school) who were not in these classes but were block programmed.

attendance in 1987-88 was substantially higher than that of not-clustered students. It may be, however, that these students were better known to program staff and that their absence was a matter of greater concern. It could also be that targeted students' attendance in the PCEN classes as such was lower than attendance in school generally, as the OSP and TC observations suggest, and that this stimulated attendance outreach.

The hypothesis that clustering itself affected students' services is supported by the pattern of changes in services over the course of the year. Table 4-7 shows that direct services declined for not-clustered students between the Fall and the Spring (from 5.4 to 4.2) while for clustered students there was no change between these two times (7.9 and 7.9). During the winter months, not-clustered students received an average of 5.3 direct services and clustered students received an average of 9.7 direct services. Table 4-7 also shows that indirect services declined for not-clustered students between Fall and Spring, from 5.3 to 4.2, while these services increased for clustered students between these two times, from 6.7 to 7.3. During the Winter, not-clustered students received an average of 6.6 indirect services and clustered students received an average of 9.3 indirect services. These statistics demonstrate that clustered students' receiving more services than not-clustered students was a consequence both of shifting services from not-clustered students to clustered students and of adding more services for clustered students.

The Effects of Clustering on Services in the CBO Schools Compared With the School-Alone Schools

The pattern of clustered students receiving more services than non-clustered students held as strongly for CBO model schools as it did for School Alone model schools. Table 4-8 shows that students in the CBO model received an average of 16.3 indirect services if they were not in a cluster and 25.0 indirect services if they were in a cluster. Students in the School Alone model were recorded as receiving an average of 16.1 indirect services if they were not in a cluster and 22.8 indirect services if they were in a cluster.

In the CBO schools, the average student in a cluster was recorded as receiving 35.5 direct services, while the average student not in a cluster was recorded as receiving 18.6 direct services. In the School Alone model, the average student in a cluster received 22.4 direct services and the average student not in a cluster received 12.6 direct services.

As explained above, the School Alone model served more students, so that the lower number of services recorded per student does not represent a lower total volume of services for

TABLE 4-7

Per-Student Average Indirect and Direct Services by Season for Clustered and Not-Clustered Students DPP Middle Schools, 1987-88

	(N)	Sep-Dec	Jan-Mar	Apr-Jun
Indirect Services				
Clustered Students	2601	6.7	9.3	7.3
Not-Clustered Students	2151	5.3	6.6	4.2
Direct Services				
Clustered Students	2601	7.9	9.7	7.9
Not-Clustered Students	2151	5.4	5.3	4.2

TABLE 4-8

Total 1987-88 Indirect and Direct Services for Clustered and Not-Clustered Students in School-Alone and CBO Models DPP Middle Schools, 1987-88

All Schools

Type of Service	Average Total per School (N=29)	Average All Students (N=4752)	Average Cluster Students (N=2601)	Average Not-Cluster Students (N=2151)
Indirect Services	3294	20.1	23.3	16.2
Direct Services	3392	20.7	25.5	14.9

School-Alone Model

Type of Service	Average Total per School (N=18)	Average All Students (N=3333)	Average Cluster Students (N=1945)	Average Not-Cluster Students (N=1388)
Indirect Services	3722	20.1	23.0	16.0
Direct Services	3407	18.4	22.8	12.4

CBO Model

Type of Service	Average Total per School (N=11)	Average All Students (N=1419)	Average Cluster Students (N=620)	Average Not-Cluster Students (N=799)
Indirect Services	2593	20.1	25.0	16.3
Direct Services	3354	26.0	35.5	18.6

the average school in the model. The finding that clustered students received more services than non-clustered students as much in the CBO schools as in the School Alone schools strongly suggests that the CBOs' ways of accessing students in the schools were very similar to the ways of School Alone schools. This inference is confirmed by remarks in the Pupil Personnel Committee records for CBO schools and in responses to the Teachers College Survey.

Services for Students in Different Categories of Risk

Table 4-9 shows the average totals of direct and indirect services for students in different categories of risk.

There was a strong relationship between targeted students' attendance the prior year, 1986-87, and the number of direct services they received in 1987-88. Students who had been present between 0% and 50% of days in 1986-87 received substantially fewer direct services than students who had been present more than 50% of days.

There was no relationship between the frequency of direct services to targeted students and the proportion of subjects the students had passed in the previous year, 1986-87. There was a slight tendency for students who had passed fewer subjects the prior year to receive more indirect services.

Indirect services were not correlated with attendance the previous year.

Students who were one year overage received more direct services than students who were either at age or two or more years overage. The categories of service in which one-year overage students received more services than students at other levels of relative age were student conferences, individual guidance, group guidance, attendance incentives, and high school linkage; they ranked almost as high as students two years overage in average number of extended days. (Statistics not shown.) It appears that one year overage represents an intersection of students being available for direct service (students closer to expected age being present more) and need for direct service (students being older than expected age presumably needing more services).

There was a linear relationship between average total number of indirect services in 1987-88 and overage; more indirect services, principally attendance outreach, were recorded for each successively greater level of students' overage.

Students who scored at the 20th percentile or lower on the LAB test received an average total of 14.1 direct services in

TABLE 4-9

Average Total Indirect and Direct Services
for Students At Different Levels of Risk
DPP Middle Schools, 1987-88

Level of Risk	(N)	Average Indirect Services	Average Direct Services
Attendance 1986-87			
0-10%	8	25.5	9.4
11-20%	11	15.7	6.6
21-30%	15	18.7	11.1
31-40%	23	24.4	12.0
41-50%	56	20.9	12.5
51-60%	184	26.5	15.5
61-70%	504	25.8	19.1
71-80%	1215	21.9	21.1
81-90%	1529	18.1	22.3
91-100%	286	12.1	26.6
Courses Passed 1986-87			
0-20%	527	23.6	19.9
21-40%	413	21.1	22.5
41-60%	661	19.5	21.9
61-80%	874	21.2	21.5
81-100%	1897	18.7	20.6
Years Overage			
0	2472	18.1	18.5
1	1494	21.5	24.0
2	665	23.2	21.9
3	113	25.9	18.5
4	7	26.3	12.6
Limited English Proficiency			
LAB 20% or below	380	16.5	14.1
LAB 21%-39% or took a test in non-English form	553	16.8	12.6
English proficient	3819	20.9	22.5
Sex			
Male	2502	19.2	20.2
Female	2250	21.1	21.3

1987-88; students who scored between the 21st and the 39th percentile on the LAB test, or who took a standardized test in a language other than English, received an average of 12.6 direct services; and students who were not at risk for language by either of these criteria received on average a total of 22.5 direct services. Direct services, then, were recorded substantially less for students in both the narrower and the broader categories of limited English proficiency, or language risk, than students whose English was presumably stronger.

There was a fairly similar pattern for indirect services. Relatively few indirect services were recorded both for students who scored at the 20th percentile or lower on the LAB test (16.5 average total) and students in the intermediate language risk category (16.8) compared to students who were not at risk for limited English (20.9). It could not be that a lower attendance of students with limited English proficiency would explain this finding, even if it explained LEP students receiving fewer direct services, since lower attendance should predict more indirect services rather than less. This then focuses attention on the LEP students' enrollment in the enrichment and PCEN classes through which the DPP funnelled services to students.

Table 4-10 shows the proportions of students at different levels of risk who were enrolled in neither a PCEN remediation nor a DPP enrichment course, a PCEN course but not enrichment, enrichment but not a PCEN course, and both PCEN and enrichment. Students with limited English proficiency were enrolled in enrichment courses in about the same proportion as students whose English was stronger. However, in the PCEN courses, which account for more of the clustered students overall, there were relatively low proportions of both students with the lowest LAB scores (27.9% enrolled in PCEN) and intermediate level scores (22.4% enrolled) compared with students whose basic language was English (46.9% enrolled in PCEN). (See Table 4-10). It is evident that students who did not take the reading or mathematics tests which were used to determine eligibility for PCEN did not qualify for PCEN and therefore did not receive the services that were channeled to students through PCEN. While it might have been assumed that the students with LAB scores of 20 or below were receiving bilingual education classes, this assumption could not have been made about the students with scores between 21 and 39. Students at an intermediate level of language risk seem to have fallen between the cracks.

Boys received almost the same level of direct services on the average (20.2) as girls (21.3) but somewhat fewer indirect services (19.2) compared to girls (21.1). A somewhat smaller proportion of boys (40.9%) was enrolled in PCEN courses than the proportion of girls (44.4%), while almost equal proportions of boys and girls were enrolled in DPP enrichment courses. (Table 4-10.)

TABLE 4-10

Proportions of Students at Different Levels of Risk
Enrolled in PCEN Remediation and/or DPP Enrichment Classes

Level of Risk	(N)	Percent No PCEN or Enrich	Percent PCEN only	Percent Enrich only	Percent Both PCEN & Enrich
Attendance 1986-87					
0-10%	8	25.0	37.5	12.5	25.0
11-20%	11	72.7	27.3	0.0	0.0
21-30%	15	66.7	26.7	0.0	6.7
31-40%	23	69.6	21.7	4.3	4.3
41-50%	56	58.9	28.6	3.6	8.9
51-60%	184	54.9	35.3	7.6	2.2
61-70%	504	50.0	35.1	9.3	5.6
71-80%	1215	43.0	40.3	11.9	4.8
81-90%	1529	42.2	41.6	11.4	4.7
91-100%	286	45.8	29.7	19.2	5.2
Courses Passed 1986-87					
0-20%	527	54.1	32.8	6.5	6.6
21-40%	413	41.6	39.2	12.1	7.0
41-60%	661	46.9	38.1	8.5	6.5
61-80%	874	40.8	44.6	10.5	4.0
81-100%	1897	45.4	36.3	14.4	3.8
Years Overage					
0	2472	51.5	34.0	11.1	3.4
1	1494	37.6	45.0	11.2	6.2
2	665	44.4	37.1	12.9	5.6
3	113	46.9	31.9	13.3	8.0
4	7	42.9	28.6	28.6	0.0
Limited English Proficiency					
LAB 20% or below	380	57.6	23.2	14.5	4.7
LAB 21%-39% or other test in non-Engl form	553	68.7	19.0	8.9	3.4
English proficient	3819	41.6	42.0	11.5	4.9
Sex					
Male	2502	47.4	36.7	11.8	4.2
Female	2250	44.4	39.1	11.2	5.3

Case Studies Recorded in Pupil Personnel Committee Minutes

As already indicated in Chapter 3, the Pupil Personnel Committee records that were available to the evaluation--a partial sample of the meeting minutes from 21 of the schools--reported discussions of 677 individual cases, 334 boys and 343 girls. These case writeups are very brief, usually just one to three lines, but they still provide some insight into the situations that are represented even more abstractly on the MSSRs. In the great majority of cases, the action recommended was counseling, talking, or working with the student by one or another member of the DPP staff, sometimes in conjunction with incentives. The next largest category of actions was home visiting or other communication with the student's family. Program changes, testing, placements, health or social service referrals or inquiries, and talking with students' teachers were less frequently mentioned, as were, occasionally, writing up a student for truancy or a parent for educational neglect.

We have excerpted some of the records in Chapter 3 to give a sense of the range of these situations. Here we will report briefly an analysis of the reasons given or implied in the minutes for students being a case for discussion at the PPC. If it was only reported that a student was cutting or absent excessively, with no further explanatory comment, the issue was simply categorized as Absence/Cutting. A variety of situations including various sicknesses and injuries, asthma, suicide threat, and abuse of the child, were classified as Health. Pregnancy or taking care of a baby was Pregnancy/Parenting. When the student himself or herself was involved with drugs or alcohol, it was classified as Drugs. A variety of situations were categorized as Home Problems: parental neglect or conflict, a student's running away from home, a parent's involvement with drugs, a student's being needed or used to do some chore at home, a family's being displaced from their home, the student's living in a shelter, the student's living too far from school because of a relocation of the home, etc. Discipline included being disruptive in class, fighting in the school, being suspended for one of these causes, crime, and the like. Motivation causes ranged from grief to a student's not wanting to go to school. Academic Skills usually involved an observation that a student's skills were too low or needed to be tested. Special Education meant that a student was being referred to Special Education. Finally, Improvement meant that the case discussion focused on some improvement of the student in question, usually attendance, grades, or behavior, rather than on a problem as such. Many cases noted more than one of the above factors in a student's situation and the evaluator made a judgment about which one mentioned seemed to have priority or to be presented as the underlying cause or issue in the case.

Table 4-11 shows that roughly similar percentages of the male and female cases were classified as Absence/Cutting (15.0% for males, 12.8% for females), Academic Skills (5.7% for males, 4.7% for females), Special Education (3.6% for males, 2.3% for females), and Improvement (10.2% for males, 10.8% for females). A somewhat larger proportion of males (4.2%) than of females (0.6%) were cited as being involved with Drugs. However, a larger fraction of the girls (16.0%) than of the boys (5.1%) was identified as having other Health Problems, in addition to the girls (6.1%) who were cited as Pregnant/Parenting (one boy was said to be absent because he was a father). Home Problems were cited as a principal issue for more girls (35.3%) than boys (22.8%). Discipline, on the other hand, was cited for fewer girls (5.5%) than boys (22.5%).

The largest contrasts were found in the areas of Health, Home Problems, and Discipline, in addition to Pregnancy or Parenting. It is likely that some of the girls' health problems would have been linked with menstruation, but even taking this into account it appears that health problems were cited disproportionately more often for girls than for boys. At the least, girls saw themselves, or their families saw them, as having health reasons for not attending school more often than boys and their families saw boys being absent for these reasons. It may also be that school staff looked for health problems more with girls than with boys. That home problems were cited much more for girls than for boys suggests even more strongly that staff's interpretations of issues were involved. It may be that girls were called on more often than boys to help at home, as the records indeed suggest; but, as with health, the objective situation does not seem to account for all of the difference. Finally, not only is it likely that boys were acting out role expectations to be adventurous or aggressive or challenging, but staff may have perceived discipline issues in boys' behavior more often than in girls' behavior.

All told, the Pupil Personnel Committee records suggest that under the surface of similar averages of direct services to girls and boys, and slightly more indirect services to girls than boys, there were salient differences in the issues involved and possibly staff's responses to the issues. This will be important to bear in mind as we examine the different attendance and courses passed outcomes for boys and girls. Ultimately, however, the purpose of this analysis is not to reify categorical differences between boys and girls, but to stimulate further thinking about what the issues might be for each individual student and what different responses schools might make to these issues. We do note the fact that there was already a diversity of issues and responses recorded, which lent themselves to the variety of categories used in this analysis.

TABLE 4-11

Issues Identified for Individual Male and Female Students in Pupil Personnel Committee Meeting Records DPP Middle Schools, 1987-88

	Males		Females		All	
	N	Percent	N	Percent	N	Percent
Issue						
Absence, cutting, no other attribution	50	15.0	44	12.8	94	13.9
Pregnant or parenting	1	0.3	21	6.1	22	3.2
Drugs or alcohol	14	4.2	2	0.6	16	2.4
Other health issue	17	5.1	55	16.0	72	10.6
Home problems	76	22.8	121	35.3	197	29.1
Discipline, suspension	75	22.5	19	5.5	94	13.9
Motivation	36	10.8	20	5.8	56	8.3
Academic skills	19	5.7	16	4.7	35	5.2
Special Education need	12	3.6	8	2.3	20	3.0
Improved performance	34	10.2	37	10.8	71	10.5
Total	334	100.0	343	100.0	677	100.0

Finally, it should be observed that students' difficulties with their teachers, as opposed to teachers' difficulties with them, were rarely cited as the issue underlying students' unsatisfactory behavior or performance. In only a handful of cases was it stated that a student's relationship to a particular teacher was a problem, and in no case was a teacher's behavior itself cited as a problem. One very suggestive record related that many of the program students had failed social studies and science in the school concerned for the recent marking period; the action decided on was to help the students with this work. Were the staff aware that the issue might have been teachers who had trouble controlling their classes or who for other reasons failed disproportionate numbers of students? It is possible that considerations of this kind were not recorded in the PPC minutes even though they were discussed. These too are questions that need to be pursued in improving the DPP services to middle school students.

Summary

At a most general level, the analysis of the distribution of recorded DPP services to students indicates the following:

1. The largest numbers of services recorded were telephone and mail, which added together with auto dialer calls accounted for almost two-fifths of all services. The next largest categories, in order, included extended day, individual student guidance, home visit, student conference, and group guidance, which together accounted for another half of all services. Relatively few services were recorded in the categories of attendance incentives, high school linkage, parent guidance or parent conference, health record review, vision screening, hearing screening, and physical examination. About half of all the services recorded involved direct contact with students and the remaining half, mostly attendance outreach, entailed indirect contact with students.

2. Individual schools varied greatly in the numbers of services recorded, reflecting both different levels of actual service and different recording practices and priorities. The quality of services delivered by schools cannot be equated with the numbers of services recorded. Similarly, the numbers of services recorded in different districts varied according to priorities and practices.

3. Service levels were generally highest during the winter season (January through March), lowest during the spring (April through June), and intermediate in the fall (September through December). Individual, group, and parent counseling varied from this pattern, with the highest level being recorded in the fall, perhaps because fewer transactions were counted as guidance or

counseling after the Office of Student Progress site visits in late fall. By contrast, high school linkage increased in the winter and the spring, though never to the level called for by the program objective.

4. CBO model schools recorded more direct services per student than School Alone model schools, and about the same number of indirect services per student as SA schools. However, these averages reflect the fact that fewer students were targeted for service in the CBO schools than in the SA schools. The actual number of services recorded altogether was larger in the average SA school than in the average CBO school.

5. Students who were programmed for a remediation (PCEN) course and/or a DPP enrichment course received substantially more direct services and also indirect services than students who were not programmed for one of these courses, i. e., who were not clustered. This pattern applied equally to CBO and SA schools and suggests that the CBO schools operated similarly to the SA schools in accessing students for service.

6. Students with limited English proficiency--either by the (then) official standard of a LAB score of 20 or below, or by an expanded criterion that includes LAB scores between 21 and 39--were included in the clusters disproportionately less than students with stronger English. This was linked to the LEP students receiving substantially fewer services than not-LEP students.

7. Less than a third of the students received more than half of the total number of indirect services, and well less than a third received more than half of the direct services. To some extent, these distributions are to be expected from their being linked to students' being absent or present, but they also reflect the reality that some students command more attention than others, and the further fact that clustering affected the distribution of services.

8. Too few students were receiving services at a high enough level to warrant expecting substantial gains in the outcome variables for the program population as a whole. At the same time, there was sufficient intensity at the ends of each service range to expect differences in services received to be associated with differences in outcomes, if the services indeed contribute to changes in the outcome variables.

9. Students who were more at risk in terms of their having had previous low attendance, being older than expected for grade, and having limited English proficiency (above) received fewer direct services than students who were less at risk by these criteria. Direct services were not correlated with prior year courses passed or with students' sex. Students with limited

English proficiency received fewer indirect services than other students, but students who were more at risk in terms of prior course failures and overage received more indirect services.

10. Analysis of the Pupil Personnel Committee records showed that home problems and health problems (in addition to pregnancy or parenting) were cited as reasons for absence or unsatisfactory performance of girls more often than of boys, and that disciplinary problems and drugs were cited more often for boys than for girls. Relatively few cases focused on academic issues, and teachers' behavior was virtually never cited as the cause of students' problems.

11. The fact that students who were in clusters received higher levels of recorded services does demonstrate that it is possible to affect the distribution of services by structural interventions. A problem to be solved in the future is how to use clustering to reach the students who are more difficult rather than easier to access, i. e. students with higher absence rates at the beginning of the year. All in all, it appears that there were as many unintended patterns as intended ones in the distribution of services to students. Reviewing the implementation of the program as discussed in Chapter 3, we would attribute this finding to the program's having been imposed on the schools and CBO's from the higher levels of the education hierarchy, especially the Office of Student Progress and the New York State Assembly, rather than its being built more directly on the goals and resources of the participating schools.

Chapter Five

PROGRAM OUTCOMES FOR MIDDLE SCHOOL STUDENTS PARTICIPATING IN THE DROPOUT PREVENTION PROGRAM, 1987-88

Introduction

We have seen that the 4752 middle school students who took part in the Dropout Prevention Program during 1987-88 varied widely on a number of background characteristics, especially their prior histories of school attendance and achievement. This chapter will present information on how well these students did in school during 1987-88, and will examine whether students with different background characteristics also showed differences in their school performance. We will be able to compare their attendance with that for similar students not enrolled in the Dropout Prevention Program, in order to estimate the actual effects of the program. In Chapter Six, we will offer some interpretations of the outcome data, in light of the discussion of program implementation in the previous chapters as well as data on the program services received by individual students.

Program Goals. Guidelines for the 1987-88 Dropout Prevention Program were set forth in the Board of Education Chancellor's Special Circular #37, dated May 8, 1987. Four minimum performance standards were set for the middle schools:

a) A minimum of 50 percent of the students provided with dropout prevention services will have 1987-88 attendance that is better than in 1986-87.

b) A minimum of 50 percent of the students provided with dropout prevention services will pass at least one more subject in 1987-88 than they did in 1986-87. (This applies only to participating students who failed one or more subjects during the previous year.)

c) Starting with 1985-86 as a baseline year, a minimum of 50 percent of the students, ninth grade or below, provided with dropout prevention services will still be in school three years later.

d) A minimum of 50 percent of the middle school students provided with dropout prevention services will be promoted to the next highest grade at the end of the school year.

The third objective, on student retention over a three-year period, will be discussed in a later report on the longitudinal results of the Dropout Prevention Program. This chapter will focus on students' performance during the 1987-88 school year.

Expected performance of middle school students. The Chancellor's minimum program objectives established benchmarks for the program to meet. However, one can assess the effects of an intervention program on student performance accurately only if one knows how students would fare in the absence of the program. For instance, it may be that all middle school students tend to increase their attendance from one year to the next, in which case the attainment of the Chancellor's first objective would not be attributable to the program.

We have a limited amount of information available to help us understand what the expected performance of middle school students might be. First, we looked at the average attendance in 1986-87 and in 1987-88 for all students in each grade in the 29 schools in the Dropout Prevention Program. There was quite a bit of variation in the patterns from one school to the next. In some schools, for example, ninth grade attendance was much higher than the attendance of seventh or eighth graders. In other schools, attendance was fairly consistent across the grades, and in still other schools, there appeared to be random fluctuations. However, when we averaged the attendance by grade for all schools together, we found a clear pattern: middle school student attendance tends to remain steady or to decline one to two percentage points at each successive grade level. Using 1987-88 data, for example, we found that the average attendance rate was 85% for sixth graders, 84% for seventh graders, 83% for eighth graders, and 83% again for ninth graders (see Table 5-1).[1] In light of this, attainment of the Chancellor's performance objective for student attendance -- that at least 50% of the students will improve their attendance from one year to the next -- would appear to be attributable to program effects.

There is further evidence to support this. We also looked at the attendance of just those students in the 29 DPP middle schools who were eligible for the Dropout Prevention Program on the basis of their prior year attendance, but who were not enrolled in the program, for one reason or another. The number of such students was different in each school, since schools had varying success in being able to identify and enroll all eligible students in their program. Since these non-enrolled students

---

1. It is important to note that this is a grade-level analysis: the average attendance for all students in one grade is compared to the average attendance for all students in another grade. The analysis of DPI outcomes, in contrast, is a student-level analysis: attendance change is first computed for each individual student and then averaged across all students. It is possible that the grade-level analysis masks different patterns of individual declines or gains in attendance from one grade to the next.

TABLE 5-1

Average Schoolwide Attendance, by Grade Level
DPP Middle Schools, 1987-88

School Code	1986-87 Grade 6	1986-87 Grade 7	1986-87 Grade 8	1986-87 Grade 9	1987-88 Grade 6	1987-88 Grade 7	1987-88 Grade 8	1987-88 Grade 9
14	85.5%	86.1%	84.0%	--	85.6%	81.7%	82.1%	--
15	83.4%	82.4%	80.3%	--	84.5%	85.6%	81.2%	--
16	90.3%	82.8%	89.7%	90.5%	87.6%	89.5%	87.6%	92.3%
17	80.4%	82.6%	83.9%	--	80.7%	78.2%	81.2%	--
18	87.5%	80.8%	80.6%	95.9%	86.1%	82.8%	80.6%	93.2%
19	86.3%	85.0%	85.3%	--	84.2%	84.4%	83.8%	--
20	--	82.7%	81.8%	81.3%	--	79.9%	82.6%	82.4%
21	89.9%	90.4%	91.2%	--	91.5%	91.0%	90.5%	--
22	--	89.8%	86.8%	88.6%	--	89.1%	87.3%	88.3%
23	85.3%	82.0%	80.2%	77.8%	88.6%	86.6%	83.1%	79.0%
24	79.6%	82.3%	77.9%	--	77.3%	78.1%	77.5%	--
25	84.4%	82.1%	84.3%	--	80.3%	82.3%	85.3%	--
26	85.6%	81.7%	84.0%	--	86.1%	85.5%	82.9%	--
27	91.7%	89.0%	89.2%	85.4%	92.5%	89.3%	89.1%	84.2%
28	84.1%	78.0%	81.1%	--	87.1%	81.5%	82.1%	--
29	84.7%	84.3%	83.1%	--	84.3%	83.6%	83.4%	--
30	--	85.3%	83.1%	80.3%	93.9%	83.5%	81.1%	74.8%
31	86.8%	88.8%	87.5%	93.9%	84.8%	87.4%	86.1%	94.1%
32	--	84.8%	83.7%	84.1%	88.0%	81.3%	82.0%	86.2%
33	--	78.0%	76.8%	78.5%	--	79.1%	77.4%	79.4%
34	89.0%	83.4%	85.3%	--	89.8%	85.0%	89.1%	--
35	--	82.9%	82.6%	86.8%	--	85.5%	84.5%	88.5%
36	85.2%	84.6%	86.2%	90.4%	85.0%	84.0%	81.6%	91.4%
37	--	84.7%	83.8%	--	--	82.4%	84.2%	--
38	82.5%	82.2%	80.0%	--	82.6%	79.7%	77.2%	--
39	--	84.0%	78.4%	78.0%	--	84.2%	80.9%	78.0%
40	90.3%	79.4%	83.9%	85.1%	85.9%	85.9%	79.2%	77.7%
41	87.6%	82.8%	78.2%	85.9%	85.5%	83.1%	84.6%	85.9%
42	--	83.2%	84.9%	81.5%	--	80.9%	79.1%	84.9%
All Schls	85.8%	83.6%	83.4%	83.2%	85.1%	83.6%	82.8%	82.6%

have at least one important characteristic in common with the program students -- poor prior attendance, they can be considered a "control" or comparison group. These students show a decline of -2.9% in attendance from 1986-87 to 1987-88. (It is reasonable that this decline would be slightly larger than the one noted for middle school students overall, since these are students who already have a record of relatively poor attendance.) Again, these data suggest that any positive change, or indeed any change above a two or three percent decline, could be considered at least in part a direct effect of the Dropout Prevention Program. (Outcomes for the comparison group students will be discussed again below, with tables showing outcomes per school.)

Unfortunately, estimating the expected course performance of middle school students is more difficult, since information on the number of courses passed and failed by either the entire school population or a comparison group of at-risk students was not available to us. One might keep in mind that middle school students legally do not need to pass all of their major courses (English, social studies, mathematics, and science) in order to progress from one grade to the next, but that students who fail two or more courses typically are not promoted.

Missing data. Before turning to an examination of student outcomes, we must also recall the complications raised by missing data. As was noted in Chapter Two, the extent of missing data was much less than in previous years of the evaluation, but its effects, if any, on program outcomes should be determined.

Attendance for 1986-87 ("prior year") was missing for 11% (or 512) of the program students.[2] Attendance figures for 1987-88 were missing for only 3% (119) of the students, but the change scores from one year to another were missing for 13% (614 students). The problem is more severe when individual schools are considered; five middle schools (Schools 14, 15, 24, 34, and 37) were missing attendance change scores for more than 30% of their program students, and another three schools were missing change scores for over 20% of their students.

The greatest problems with missing data occurred with students who did not have prior year attendance figures. These students came in fairly equal proportions from the categories of

---

2. In calculating average proportion of days present and average proportion of courses passed for both 1986-87 and 1987-88, if there was information on only one semester in a given year, that figure was used as the full-year figure. Since rates of attendance and courses passed generally differ from fall to spring, there is some unavoidable inaccuracy introduced by this substitution.

1987-88 attendance, as follows:

Students with 1987-88 attendance of 0-50%: 9 percent of them were missing data on 1986-87 attendance.
Students with 1987-88 attendance of 51-70%: 11 percent were missing 1986-87 data.
Students with 1987-88 attendance better than 70%: 11 percent were missing 1986-87 data.

This distribution would suggest that the outcome figures are not biased too much because of the exclusion of cases with missing attendance data for 1986-87.

Of the 4752 students in the program, 3574, or 78%, had data on courses passed for both 1986-87 and 1987-88, and thus could have a change score computed. Nearly three hundred students had no data on courses passed in 1986-87, and almost 800 were missing course data for 1987-88. More bias therefore is attributable to students missing 1987-88 course data. These students came in slightly greater proportions from the categories of students with lower numbers of courses passed in 1986-87, and they also tended to come more from the categories of low 1986-87 and low 1987-88 attendance. Thus, the omission of these 798 students from analyses regarding courses passed may slightly inflate courses passed outcomes.

Different schools had different proportions of missing course data. In five schools (Schools 15, 17, 26, 36, and 37), more than a third of the program students were missing data on change in courses passed, and thirteen more had over 20% missing data. Thus, program outcomes for these schools will need to be carefully assessed.

Student Attendance

Attendance change. The average attendance of program students in 1987-88 was 74.3%. In 1986-87, these same students had had an average attendance rate of 77.4%. Program students experienced an average decline in attendance of three percentage points (-3.4%) from the previous year.[3]

Students participating in the Dropout Prevention Program

---

3. Change scores are computed only for students who have data for both years. The overall average attendance rate for each separate year, however, is computed on all students who have data relevant to that year, whether or not they have the other year's data. Thus, a simple subtraction of the Year 2 overall average from the Year 1 overall average will not result in the change score.

during 1986-87 had had average prior year attendance of 78% and program year attendance of 77%, with an average change in attendance of -1.6%. Thus, the outcome for Year Three is slightly lower than that for Year Two. The average attendance change for Year One students was -4.2%.

We have seen in Chapter Three that there were wide variations in program implementation across the twenty-nine middle schools. Correspondingly, changes in student attendance also varied from school to school. The average attendance rates for 1987-88, with the percentage change from 1986-87, for all schools are shown in Table 5-2. Schools with the highest attendance outcome for 1987-88 were School 17 (+3.0%); School 19 (+2.3%); and School 29 (+1.0%). Schools with the lowest attendance outcome were School 14 (-9.0%); School 15 (-7.8%); School 42 (-7.7%); School 40 (-6.8%); and School 27 (-6.7%).[4]

Consistent with variation across schools, the ten community school districts in the Dropout Prevention Program also showed a range of outcomes on student attendance. No district had an overall gain in attendance for program students; losses varied from -1% in District 27 to -7% in District 7 (see Table 5-3). There was, however, no difference between the School-Alone and CBO models in attendance change; both showed a loss of somewhat above three percent.

Given the range of attendance outcomes among schools, even within the context of an average decline in attendance for program students overall, we can (once again) state the importance of looking at local situations: how the dropout prevention programs at individual schools (and districts) interpreted and followed central guidelines, how they made use of the resources already present at the school, how they coped with problems that arose, and most importantly how they translated program goals and objectives into changes in the daily school lives of students. As we trace through the statistical findings on program outcomes in this chapter, we should keep in mind the question that will be picked up in subsequent chapters: in what ways did the Dropout Prevention Program work well and how can small successes be duplicated and extended?

Students who improved their attendance. As noted earlier, the Chancellor's program objective called for fifty percent of the students improving their attendance over their 1986-87 rates. This objective was not quite met. Overall, forty-seven percent of the program students improved their attendance.

Table 5-4 shows the proportion of program students in each

---

4. Recall that Schools 14 and 15 were missing attendance change scores for a third of their students.

TABLE 5-2

Attendance Outcomes for Program Students
DPP Middle Schools, 1987-88

	Average 1986-87 Attendance	Average 1987-88 Attendance	Change over 1986-87	(N)
OVERALL	77.4%	74.3%	- 3.45%	(4372)
School-only Model	77.7%	74.7%	- 3.43%	(2864)
14	79.7%	72.8%	- 9.04%	(142)
15	79.4%	73.6%	- 7.80%	(131)
17	75.8%	77.4%	+ 2.96%	(113)
18	74.9%	70.7%	- 5.53%	(157)
20	78.1%	74.7%	- 3.60%	(185)
21	80.1%	80.5%	- 0.90%	(127)
24	71.7%	71.7%	- 2.83%	(118)
25	77.4%	77.7%	- 0.14%	(169)
28	78.7%	76.9%	- 0.90%	(138)
29	76.9%	78.8%	+ 0.97%	(159)
31	78.1%	73.7%	- 4.28%	(203)
33	78.3%	74.7%	- 3.62%	(184)
34	77.2%	73.6%	- 3.09%	(109)
35	79.7%	75.2%	- 4.53%	(176)
36	79.3%	74.2%	- 4.72%	(220)
38	77.1%	73.7%	- 3.45%	(170)
39	78.2%	72.5%	- 5.67%	(172)
41	76.8%	74.4%	- 3.20%	(191)
CBO/School Model	76.6%	73.3%	- 3.48%	(1274)
16	80.7%	77.5%	- 4.23%	(85)
19	74.9%	76.9%	+ 2.31%	(86)
22	75.3%	70.7%	- 4.74%	(126)
23	73.6%	71.0%	- 2.37%	(125)
26	78.2%	78.0%	- 0.26%	(231)
27	79.0%	72.6%	- 6.73%	(106)
30	76.6%	76.5%	- 0.14%	(108)
32	76.8%	71.9%	- 5.86%	(100)
37	75.0%	71.2%	- 5.07%	(95)
40	73.9%	66.7%	- 6.78%	(117)
42	78.1%	70.3%	- 7.67%	(95)

TABLE 5-3

Attendance Outcomes for Program Students, by District
DPP Middle Schools, 1987-88

	Average 1986-87 Attendance	Average 1987-88 Attendance	Change over 1986-87	(N)
OVERALL	77.4%	74.3%	- 3.45%	(4372)
School-Alone Model				
District 7	78.9%	73.3%	- 6.92%	(382)
District 9	75.8%	74.6%	- 2.02%	(478)
District 10	78.2%	75.6%	- 2.39%	(473)
District 14	78.9%	76.6%	- 2.78%	(437)
District 17	77.7%	73.0%	- 4.79%	(580)
District 32	77.4%	75.7%	- 2.14%	(514)
CBO/School Model				
District 3	78.5%	73.1%	- 5.98%	(280)
District 15	76.0%	69.9%	- 6.03%	(349)
District 19	75.6%	74.5%	- 1.03%	(289)
District 27	76.6%	75.6%	- 1.00%	(356)

school who had an attendance improvement, along with the average rate of improvement. Eleven of the twenty-nine middle schools met the objective of having at least half their students show improvement. This was a marked change from Year Two of the program, when only one of the schools met this objective and only 35% of the program students overall improved their attendance. The most successful school was School 29, where 61% of the program students showed an attendance gain. The lowest rate was in School 14, where only 29% of the program students improved their attendance.

In five of the ten districts (Districts 9, 10, 19, 27, and 32), half of the program students improved their attendance, but in no case did the proportion of improvers exceed 54%. There were no model-level differences on this outcome; both the School-Alone and the CBO model showed attendance improvement for about 47% of their students.

Proportion of Courses Passed

Change in courses passed. Students in the 1987-88 Dropout Prevention Program had passed, on average, 70% of their courses during 1986-87. They passed 72.7% of their courses during 1987-88. Thus, students in DPP had an average increase in the proportion of courses passed of about two percentage points (+1.85%) from 1986-87 to 1987-88. This is the equivalent of passing about one-tenth of a course more per student.

A slightly better outcome had been reported for Year Two of the Dropout Prevention Program. That year (1986-87), program middle school students passed 70% of their courses, compared to a 65% passing rate the prior year, for an average change of +4.2% in courses passed. The change in courses passed for Year One students was +1.5%.

As with attendance, there were important school-to-school differences along the dimension of courses passed (Table 5-5). School 29 was far ahead of the other schools, showing an average gain in courses passed of +28%. The next most successful programs were in School 16, with an average gain of +17%, School 19, with an average gain of +12%, and School 21, with an average gain of +11%. The greatest losses in proportion of courses passed were reported for School 14 and School 31, each with an average loss of -11%, and for School 22, with an average loss of -9%.

The change scores for courses passed varied much more from school to school than did the change scores for attendance. This is probably due in large part to the much greater latitude schools have in constructing course grades. Attendance is fairly objective: either students are in school or they are not, and if

TABLE 5-4

Students Who Improved Their Attendance
DPP Middle Schools, 1987-88

School Code	Students with Improved Attendance %	(N)	Average Attendance Change of Improvers
OVERALL	46.4%	(1962)	+9.4%
School-Alone Model			
14	28.9%	(41)	+9.0%
15	0.42%	(55)	+8.2%
17	74.3%	(84)	+9.9%
18	50.3%	(79)	+9.2%
20	53.0%	(98)	+7.9%
21	53.5%	(68)	+8.4%
24	54.2%	(64)	+9.7%
25	56.8%	(96)	+10.3%
28	50.0%	(69)	+9.9%
29	61.0%	(97)	+8.6%
31	38.4%	(78)	+12.9%
33	47.8%	(88)	+8.2%
34	43.1%	(47)	+10.8%
35	40.9%	(72)	+8.7%
36	43.6%	(96)	+9.2%
38	43.5%	(74)	+9.6%
39	38.4%	(66)	+9.5%
41	46.6%	(89)	+9.7%
CBO Model			
16	37.6%	(32)	+10.7%
19	59.3%	(51)	+10.9%
22	43.7%	(55)	+9.4%
23	49.0%	(60)	+9.2%
26	56.3%	(130)	+8.4%
27	44.3%	(47)	+6.9%
30	50.0%	(54)	+9.8%
32	44.0%	(44)	+8.0%
37	45.3%	(43)	+9.7%
40	46.2%	(54)	+11.4%
42	32.6%	(31)	+12.3%

TABLE 5-5

Courses Passed Outcomes for Program Students
DPP Middle Schools, 1987-88

	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Change over 1986-87 (N)
OVERALL	69.8%	72.7%	+ 1.85% (3574)
School-only Model	70.1%	74.3%	+ 2.76% (2502)
14	74.3%	63.8%	- 10.77% (175)
15	59.4%	65.9%	+ 6.75% (124)
17	69.7%	79.8%	+ 7.44% (82)
18	56.3%	62.2%	+ 2.92% (145)
20	74.4%	72.8%	- 3.27% (149)
21	72.5%	86.3%	+ 11.17% (128)
24	69.1%	75.0%	+ 4.14% (148)
25	66.1%	75.4%	+ 9.68% (145)
28	76.1%	70.4%	- 7.52% (137)
29	59.6%	87.7%	+ 27.60% (124)
31	75.7%	67.1%	- 10.90% (151)
33	73.2%	74.5%	+ 1.16% (136)
34	67.5%	74.8%	+ 5.78% (131)
35	77.8%	81.0%	- 1.09% (128)
36	71.7%	78.8%	+ 5.38% (154)
38	77.0%	83.5%	+ 5.70% (136)
39	70.7%	68.1%	- 2.01% (141)
41	68.5%	76.3%	+ 6.63% (168)
CBO/School Model	69.2%	68.8%	- 0.28% (1072)
16	62.7%	78.8%	+ 17.04% (93)
19	59.7%	74.2%	+ 12.21% (86)
22	73.0%	64.9%	- 8.63% (114)
23	80.4%	74.2%	- 5.48% (91)
26	82.8%	82.5%	- 3.14% (121)
27	65.8%	65.7%	- 1.79% (93)
30	67.3%	63.8%	- 4.17% (90)
32	50.4%	56.9%	+ 6.08% (109)
37	62.0%	59.2%	- 6.55% (91)
40	69.2%	66.9%	- 2.86% (91)
42	72.9%	68.9%	- 3.96% (93)

schools report attendance accurately, it is likely that changes will not be dramatic. Grades, however, depend on many more subjective factors, including the desire to motivate or reward students for increased effort as well as real gains in achievement. This is not to discount the gains reported by some schools for their students; as we will discuss in the next chapter, there is evidence to support the validity of and reasons for those gains. However, we want to caution that increases in course performance alone, if they are not accompanied by stabilization of student attendance, if not actual increases, may not be sufficient to ensure continued academic success for students.

Table 5-6 shows the average change in courses passed for each of the ten school districts in the Dropout Prevention Program. Consistent with school-level changes, District 32 showed the strongest gains (+9%), followed by District 9 (+7%) and District 3 (+6%). Districts 15 and 27 showed the greatest losses in courses passed (-5% and -4%, respectively).

Unlike the situation with attendance, where outcomes for the School-Alone and CBO models were virtually identical (-3% declines), there was quite a difference in the proportion of courses passed by students in the two program models. Students in the CBO model showed a very slight decline in the proportion of courses passed, -0.3%, while students in the School-Alone model showed an increase of +2.8%. This latter figure amounts to a bit more than a tenth of a course per student -- a fairly meaningless figure for individuals, but the magnitude of the difference between the models does indicate that the School-Alone model schools were somewhat more successful at influencing course performance. As we shall see shortly, the difference between models can be accounted for almost entirely by looking at the outcomes for students who were enrolled in remedial classes or enrichment classes.

Unfortunately, as we noted earlier, we have no data on the course performance of comparison group students, and so cannot determine whether these change scores are better, worse, or about the same as one might expect from students in the absence of an intervention program.

Students who improved their rate of passing courses. Of the 4752 students in the program, 2127 or 45% of them had failed at least one course during the prior year (another 1178 or 25% had missing data on courses passed). The program's performance objective that at least half of the students who had failed one or more courses the previous year would improve their course performance during 1987-88 thus applied to these 2127 students. The performance objective was met: 62% of these students did pass more courses in 1987-88 than they had in 1986-87.[5]

TABLE 5-6

Courses Passed Outcomes for Program Students, by District
DPP Middle Schools, 1987-88

	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Change over 1986-87 (N)
OVERALL	69.8%	72.7%	+ 1.85% (3574)
School-Alone Model			
District 7	67.3%	67.6%	- 0.68% (430)
District 9	68.0%	75.6%	+ 6.79% (461)
District 10	74.1%	78.3%	+ 1.82% (346)
District 14	73.1%	74.7%	+ 0.29% (406)
District 17	68.6%	69.5%	- 0.88% (450)
District 32	70.7%	81.1%	+ 9.07% (409)
CBO/School Model			
District 3	61.6%	67.5%	+ 6.48% (295)
District 15	69.5%	65.8%	- 4.74% (298)
District 19	63.0%	65.7%	+ 0.29% (267)
District 27	82.1%	78.5%	- 4.15% (212)

On a school-by-school basis, in only one school did fewer than half of the students with prior failure(s) pass more courses during 1987-88, and the proportion in that school was 47.8% -- very close to the objective (Table 5-7). All districts had more than fifty percent of the relevant students passing more courses in 1987-88 than they had in 1986-87. In the School-Alone model, 64% of the students passed more courses in 1987-88, compared to 59% in the CBO model.

The average change in proportion of courses passed for the students who had at least one failure in 1986-87 and did better in 1987-88 was +40%, the equivalent of two additional courses. Those students with at least one prior failure who did not improve had an average change of -24%, the equivalent of passing about one course fewer than the year before.

It should be observed, however, that this performance objective applies to only 45% of the students in the Dropout Prevention Program. Another 1447 or 30% of the students had not failed a course during 1986-87, and thus technically could not improve (the rest were missing cases). In order to take a closer look at course improvement, we looked at the full group of students in the program and analyzed whether students had passed more, fewer, or the same proportion of courses in 1987-88 as they had the previous year, regardless of whether they failed a course in 1986-87.

Table 5-8 shows, by school, the percentage of students who passed fewer, more, or the same proportion of courses in 1987-88 as in 1986-87. Overall, the students were about evenly divided into the three groups. In the first group, 1130 students (or 32%) passed a lower proportion of courses in 1987-88 than they had the previous year. Another 1117 students (31%) had no change

---

5. The Chancellor's objective was stated in terms of raw numbers of courses: students with at least one prior failure would pass at least one more course in 1987-88. However, the total number of courses taken by students was sometimes recorded differently for the two program years. For example, a student whose record showed 2 of 4 courses passed the first year and 3 of 7 courses passed the second year would be considered to have passed more, even though only 2 of the 3 passes the second year were in the same courses (e.g., English or math) recorded the first year, while the third pass might have been in a health class that was not counted the first year, whether or not the student passed it. To remedy this, we looked at changes in the proportion of courses passed, and counted a 20% improvement as the equivalent of passing one additional course. Thus, those students with greater than a 20% improvement in courses passed were considered to have met the performance criterion.

TABLE 5-7

Proportion of Students With At Least One Prior Year Course Failure Who Passed More Courses in 1987-88 DPP Middle Schools, 1987-88

School Code	Number of students with at least 1 failure in 1986-87	Students passing more courses in 1987-88* %	(N)	Average change in courses passed	Rank
OVERALL	2127	62.4%	(1327)	+ 40.5%	
School-Alone Model					
14	82	54.9%	(45)	+ 41.8%	23
15	94	52.1%	(49)	+ 52.8%	27
17	59	71.2%	(42)	+ 30.8%	7
18	97	54.6%	(53)	+ 40.7%	24
20	86	58.1%	(50)	+ 35.9%	18
21	59	76.3%	(45)	+ 50.0%	4
24	92	62.0%	(57)	+ 40.4%	15
25	87	72.4%	(63)	+ 45.8%	6
28	56	64.3%	(36)	+ 39.4%	10
29	101	84.2%	(85)	+ 44.1%	1
31	94	51.1%	(48)	+ 23.8%	28
33	74	63.5%	(47)	+ 43.0%	11
34	68	73.5%	(50)	+ 50.6%	5
35	57	66.7%	(38)	+ 32.6%	8
36	116	62.9%	(73)	+ 30.5%	14
38	53	77.4%	(41)	+ 47.6%	3
39	88	55.7%	(49)	+ 32.1%	20
41	92	63.0%	(58)	+ 48.8%	12
CBO Model					
16	71	78.9%	(56)	+ 39.2%	2
19	54	63.0%	(34)	+ 57.4%	13
22	67	47.8%	(32)	+ 38.8%	29
23	59	54.2%	(32)	+ 26.2%	25
26	41	58.5%	(24)	+ 43.3%	17
27	63	61.9%	(39)	+ 32.6%	16
30	56	55.4%	(31)	+ 39.5%	22
32	91	56.0%	(51)	+ 46.3%	19
37	63	54.0%	(34)	+ 32.3%	26
40	56	55.4%	(31)	+ 42.7%	21
42	51	66.7%	(34)	+ 40.1%	9

* These figures represent the proportion of students *with at least one prior year course failure* who passed more courses in 1987-88.

TABLE 5-8

Students Passing Fewer, More, or the Same Proportion of Courses in 1987-88 Compared to 1986-87
DPP Middle Schools, 1987-88*

School Code	Students passing more courses in 1987-88 %	(N)	Students passing the same number of courses in 1987-88 %	(N)	Students passing fewer courses in 1987-88 %	(N)
OVERALL	37.1%	(1327)	31.3%	(1117)	31.6%	(1130)
School-Alone Model						
14	25.7%	(45)	33.1%	(58)	41.1%	(72)
15	39.5%	(49)	30.6%	(38)	29.8%	(37)
17	51.2%	(42)	18.3%	(15)	30.5%	(25)
18	36.6%	(53)	33.1%	(48)	30.3%	(44)
20	33.6%	(50)	32.9%	(49)	33.6%	(50)
21	35.2%	(45)	46.9%	(60)	18.0%	(23)
24	38.5%	(57)	25.7%	(38)	35.8%	(53)
25	43.4%	(63)	33.8%	(49)	22.8%	(33)
28	26.3%	(36)	35.0%	(48)	38.7%	(53)
29	68.5%	(85)	19.4%	(24)	12.1%	(15)
31	31.8%	(48)	23.2%	(35)	45.0%	(68)
33	34.6%	(47)	33.1%	(45)	32.4%	(44)
34	38.2%	(50)	32.1%	(42)	29.8%	(39)
35	29.7%	(38)	40.6%	(52)	29.7%	(38)
36	47.4%	(73)	25.3%	(39)	27.3%	(42)
38	30.1%	(41)	48.5%	(66)	21.3%	(29)
39	34.8%	(49)	30.5%	(43)	34.8%	(49)
41	34.5%	(58)	42.3%	(71)	23.2%	(39)
CBO Model						
16	60.2%	(56)	20.4%	(19)	19.4%	(18)
19	39.5%	(34)	37.2%	(32)	23.3%	(20)
22	28.1%	(32)	24.6%	(28)	47.4%	(54)
23	35.2%	(32)	23.1%	(21)	41.8%	(38)
26	19.8%	(24)	52.1%	(63)	28.1%	(34)
27	41.9%	(39)	20.4%	(19)	37.6%	(35)
30	34.4%	(31)	28.9%	(26)	36.7%	(33)
32	46.8%	(51)	22.0%	(24)	31.2%	(34)
37	37.4%	(34)	19.8%	(18)	42.9%	(39)
40	34.1%	(31)	28.6%	(26)	37.4%	(34)
42	36.6%	(34)	22.6%	(21)	40.9%	(38)

* This table includes all students in the Dropout Prevention Program with data on courses passed for both years. The Chancellor's minimum performance objective applied only to those students who had failed at least one course in 1986-87.

in the proportion of courses passed. Finally, 1327 students (37%) passed more courses in 1987-88 than the previous year.

Table 5-9 shows the prior year and present year proportion of courses passed and the change score for each group of students. Students showing no change in courses passed were, on average, passing a very high proportion of their courses both years: 87%. Students showing a decline in courses passed had passed, on average, 83% of their courses in 1986-87. Their course passing rate declined by 42%, or the equivalent of just over two courses, to a rate of 41% in 1987-88. Students showing a gain in courses passed had passed only 48% of their courses in 1986-87, and gained the equivalent of two courses (+40%) to achieve a course passing rate of 88% in 1987-88. In effect, then, two groups of students essentially switched places over the two year period. This finding held true in all 29 middle schools: a group of students with good prior course performance declined dramatically, while another group of students had an equally dramatic increase.

These results are more sobering than those pertaining to the Chancellor's performance objective, but they probably reflect the program's outcomes more accurately: about as many students improved their course performance as declined in performance, and an approximately equal number of students had no change.

Relation of Attendance Change to Courses Passed Change

One implicit assumption of the Dropout Prevention Program appears to be that improving student attendance will result in a corresponding improvement in course performance. Table 5-10 shows the proportion of attendance improvers who gained, declined, or remained the same in proportion of courses passed. It appears that attendance improvement is not always a guarantee of improvement in courses passed: 21% of the students with increased attendance declined in courses passed. However, improvement in courses passed was achieved by more of the students whose attendance improved than by students whose attendance did not improve (43% vs. 30%). The lower panel of Table 5-10 also shows the change in courses passed for students in several categories of attendance improvement. Students whose attendance increased by ten percent or more showed an average change in courses passed of +14%, compared to a decline of -20% for students whose attendance fell more than ten percent. Students whose attendance stayed essentially the same both years had a modest increase of 5% in the proportion of courses passed.

TABLE 5-9

Average Proportion of Courses Passed for Students Who Gained, Declined, or Remained the Same in Courses Passed DPP Middle Schools, 1987-88

	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Average Change (N)
Students who declined in courses passed	82.7%	41.0%	-41.7% (1130)
Students who remained the same in courses passed	86.6%	86.6%	0 (1117)
Students who gained in courses passed	47.6%	88.1%	+40.5% (1327)
Total	70.9%	72.7%	+1.9% (3574)

TABLE 5-10

Change in Courses Passed for Students Who Did or Did Not Improve Attendance
DPP Middle Schools, 1987-88

	Students who declined in courses passed		Students who had no change in courses passed		Students who gained in courses passed	
	%	(N)	%	(N)	%	(N)
Students who improved attendance	20.5%	(322)	36.1%	(566)	43.4%	(681)
Students who did not improve attendance	42.3%	(679)	28.0%	(449)	29.8%	(478)

Category of Attendance Change	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Average Change	(N)
Below -10%	64.3%	46.5%	-19.7	(747)
-10% to +10%	74.3%	80.0%	+ 5.5	(1876)
Above +10%	68.9%	83.0%	+14.4	(552)

Outcomes for Students with Different Characteristics and Program Experiences

The students who came into the Dropout Prevention Program in 1987-88 could be characterized chiefly by their *diversity* in terms of sex, age, language ability, aptitude, and prior academic performance, not to mention myriad unmeasured dimensions such as attitudes toward school, academic and occupational aspirations, and family responsibilities and other complicating circumstances. Furthermore, students had a range of program experiences. Some were enrolled in remedial classes or enrichment classes; some received only a few program services, while others got a wide range of services. This section will examine whether there were any striking differences in program outcomes for students who also differed in their background characteristics or program experiences.

Outcomes for males and females. We know from Chapter Two that the prior year attendance was comparable for male and female students, but that prior year courses passed rates were lower for males. In 1987-88, males and females again had the same attendance rate, 74%, and lost approximately the same percentage from their prior year values: -3.4% for males and -3.5% for females. The proportion of students who improved their attendance was virtually the same for both male and female students, at just above 47% (see Table 5-11).

Outcomes in courses passed also reflected a previous trend. Males passed an average of 69% of their courses in 1987-88, compared to 76% for females. The change in courses passed over 1986-87 performance was positive for both groups, but higher for females. Male students had an average change of +1.3%, while female students showed an average change of +2.4%. There was already a six point difference in the average course passing rates of males and females during 1986-87; that, combined with the difference in gain scores, meant that at the end of 1987-88, males were even farther behind females in passing courses than they had been at the beginning of the year. More of the male students (35%) than female students (28%) had declines in the proportion of courses passed. Slightly more males than females showed an increase in courses passed (38% vs. 36%), but more females than males showed no change in courses passed. (Table 5-11).

Overall, then, the program in 1987-88 was not able to interrupt the relative disparity between male and female course performance.

Outcomes for students in the different grades. Table 5-12 shows the change in attendance and courses passed for students in the different grade levels. Special education students showed the largest decline in attendance (-6%). Ninth graders had the

TABLE 5-11

Attendance and Courses Passed Outcomes, by Gender
DPP Middle Schools, 1987-88

	Average 1986-87 Attendance	Average 1987-88 Attendance	Average Change Over 1986-87	(N)	Percent Improved
Males	77.5%	74.3%	-3.4%	(2181)	47.5%
Females	77.3%	74.2%	-3.5%	(1957)	47.3%

	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Average Change 1986-87	(N)	Percent Declined	Percent the Same	Percent Improved
Males	66.6%	69.2%	+1.3%	(1843)	34.9%	27.0%	38.1%
Females	73.3%	76.4%	+2.4%	(1731)	28.1%	35.8%	36.1%

next largest attendance decline (-4%) and the smallest increase in courses passed (+0.6%). Seventh and eighth graders showed comparable changes in attendance (about -2.5%), but seventh graders increased their courses passed by +4%, compared to only +1% for eighth graders.

Students who were repeating a grade in 1987-88 (i.e., who had not been promoted after 1986-87) had an average gain in courses passed of +14%, compared to a gain of only +0.4% for students who had been promoted. However, the non-promoted students had an average attendance change of -6.4%, compared to -2.4% for the students who had been promoted. This suggests that retention improves a student's course performance, at least for the short term, but has a negative effect on attendance, which may signal a growing disenchantment with school.

Outcomes for students who were overage for grade. Table 5-13 shows the changes in attendance for students who were one, two, and three years over the expected age for their grade level, as well as for students who were not considered overage. Losses in attendance were greater for students who were progressively more overage: students not overage had an average attendance decline of -2.4%, compared to a -8.4% decline for students three years overage. The range in average prior year attendance had been from 78% for students not overage to 73% for students three years overage; in 1987-88, the spread increased, from 76% for students not overage down to 65% for students three years overage.

The change in courses passed broken down by whether students were overage for grade did not follow such a simple pattern (Table 5-14). Both the students who were not overage and those who were one year overage increased the proportion of courses passed: the change was +1.7% and +2.7%, respectively. Students who were two years overage for grade showed a slight decline in the proportion of courses passed: -0.3%. The few students (N=80) who were three years overage showed an increase of +3.4%. In each of the categories of overage, about the same proportions of students decreased, increased, or maintained their rate of passing courses.

These figures become more meaningful when the groups are divided into categories according to whether students were promoted from one grade to the next after the 1986-87 school year (see Table 5-14, bottom panel). Students who were not promoted into a higher grade level at the beginning of the 1987-88 school year were presumably taking the same courses over again. Overall, these students increased the proportion of courses passed, although the magnitude of increase grew smaller as the students were more overage (+18% for students not overage, +4% for students three years overage).

TABLE 5-12

Attendance and Courses Passed for Students in Different Grade Levels DPP Middle Schools, 1987-88

	Average 1986-87 Attendance	Average 1987-88 Attendance	Change over 1986-87	(N)	Students who improved attendance %	(N)
Grade 6	70.1%	76.8%	+4.4%	(40)	67.5%	(27)
Grade 7	77.8%	75.1%	-2.8%	(1039)	50.1%	(521)
Grade 8	78.2%	75.6%	-2.5%	(1799)	49.1%	(884)
Grade 9	79.0%	74.6%	-4.4%	(664)	44.7%	(297)
Special Ed	73.7%	67.8%	-6.5%	(478)	39.1%	(187)
Total	77.6%	74.5%	-3.3%	(4020)	47.7%	(1916)

	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Change over 1986-87	(N)	Students who passed fewer %	(N)	Students who passed the same proportion %	(N)	Students who passed more %	(N)
Grade 6	67.7%	76.0%	7.3%	(169)	29.6%	(50)	34.3%	(58)	36.1%	(61)
Grade 7	65.3%	68.9%	4.0%	(977)	31.6%	(312)	26.9%	(263)	41.1%	(402)
Grade 8	72.8%	74.2%	1.1%	(1479)	31.7%	(469)	33.1%	(489)	35.2%	(521)
Grade 9	74.0%	76.0%	0.6%	(543)	29.8%	(162)	31.9%	(173)	38.3%	(208)
Special Ed	68.1%	72.6%	0.8%	(315)	30.5%	(96)	35.6%	(112)	34.0%	(107)
Total	70.0%	73.0%	2.1%	(3483)	31.3%	(1089)	31.4%	(1095)	37.3%	(1299)

TABLE 5-13

Attendance and Courses Passed Outcomes for Overage Students
DPP Middle Schools, 1987-88

	Average 1986-87 Attendance	Average 1987-88 Attendance	Average Change Over 1986-87	(N)	Percent Improved
Not overage	78.0%	76.1%	-2.4%	(2012)	50.3%
1 year overage	77.8%	74.3%	-3.4%	(1390)	46.5%
2 years overage	75.4%	69.6%	-5.9%	(620)	42.3%
3 years overage	72.8%	64.7%	-8.4%	(108)	34.3%

	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Average Change Over 1986-87	(N)	Percent Declined	Percent the Same	Percent Improved
Not overage	73.8%	77.0%	+1.7%	(1776)	29.7%	34.7%	35.6%
1 year overage	67.9%	71.3%	+2.7%	(1214)	32.9%	28.3%	38.9%
2 years overage	63.0%	63.9%	-0.3%	(498)	34.9%	27.3%	37.8%
3 years overage	50.9%	54.6%	+3.4%	(80)	35.0%	26.3%	38.8%

TABLE 5-14

Courses Passed for Students Overage for Grade DPP Middle Schools, 1987-88

	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Change over 1986-87	(N)	% Who Declined	% Who Remained the Same	% Who Gained
Not Overage	73.8%	77.0%	+ 1.7%	(1776)	29.7%	34.7%	35.6%
1 Year Overage	67.9%	71.3%	+ 2.7%	(1214)	32.9%	28.3%	38.9%
2 Years Overage	63.0%	63.9%	- 0.3%	(498)	34.9%	27.3%	37.8%
3 Years Overage	50.9%	54.6%	+ 3.4%	(80)	35.0%	26.3%	38.8%
Students promoted after 1986-87							
Not overage	77.1%	79.4%	+ 2.1%	(1327)	28.7%	35.3%	35.9%
1 yr. overage	71.5%	72.3%	+ .04%	(1034)	34.0%	29.7%	36.3%
2 yrs. overage	69.3%	65.9%	- 5.4%	(335)	39.1%	26.6%	34.3%
3 yrs. overage	54.7%	57.4%	+ 2.8%	(32)	31.3%	31.3%	37.5%
Students not promoted after 1986-87							
Not overage	52.6%	66.7%	+18.4%	(24)	16.7%	33.3%	50.0%
1 yr. overage	44.5%	64.3%	+20.0%	(160)	25.0%	18.8%	56.3%
2 yrs. overage	48.7%	58.3%	+10.2%	(153)	26.8%	28.8%	44.4%
3 yrs. overage	48.7%	52.7%	+ 3.8%	(48)	37.5%	22.9%	39.6%

The conventional understanding is that overage students do less well in school than their counterparts who are not overage for grade; indeed, our initial look at the comparison between DPP students who were two or more years overage and those who were not did show that the overage students had greater attendance declines and smaller gains in courses passed. But the disaggregated findings call that into question. The results for the overage students may have several possible explanations. They may represent regression to the mean for students who have done so poorly in their classes that they can only improve. Those students who actually lost ground in courses passed may have been overrepresented among the students with missing data. Or, teachers may have passed overage students in order to move them through middle school and into high school.

Students with different language ability. As the figures in Table 5-15 indicate, English language proficiency differentiates students in quite interesting ways. First, consider those students who met Board-established criteria for limited-English proficient (LEP) status. The attendance of these students fell slightly more than it did for non-LEP students (-4.1% vs. -3.1%), so that in 1987-88, non-LEP students had an average attendance rate of 75.1%, compared to 72.9% for LEP students. However, over the year LEP students nearly erased the disparity between themselves and other students in courses passed. The LEP students showed a gain in courses passed of +8.1%, compared to the smaller gain of +1.5% for all other students. This brought the average proportion of courses passed in 1987-88 to 72.0% for LEP students and 72.9% for non-LEP students. We could not ascertain how many of the students who were officially regarded as limited-English proficient were thereby given special bilingual instructional services, but it seems likely that the gain in courses passed is attributable to that kind of intervention.

The second category of students represented in Table 5-15 are those who have some indicator of limited-English proficiency other than the one officially recognized by the Board of Education. These are students who scored between the 21st and 39th percentile on the Language Assessment Battery, or who recently took a standardized achievement test in a language other than English. These students had a decline in attendance (-5.3%) that was slightly larger than that for BOE-defined LEP students, and a change in courses passed (-0.3%) that was much lower than that for the first group of students. Both outcomes were lower than those for non-LEP students. Again, these figures suggest that the limited-English proficient students who were probably able to obtain special language services were able to do better in school. Unfortunately, our data do not allow us to confirm whether individual students were in fact enrolled in a bilingual education program.

TABLE 5-15

Outcomes for Students with Limited Proficiency in English DPP Middle Schools, 1987-88

	Average 1986-87 Attendance	Change over 1986-87 (N)	Change (N)	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Change (N)
Students meeting Board's criterion for limited-English proficiency*	76.3%	72.9%	-4.1% (318)	63.9%	72.0%	+8.1% (259)
Students meeting expanded criteria for limited-English proficiency**	74.2%	69.2%	-5.3% (490)	67.9%	71.1%	-0.3% (336)
Both categories combined	75.0%	70.7%	-4.8% (808)	66.3%	71.5%	+3.3% (595)
Students not designated as limited-English proficient	78.0%	75.1%	-3.1% (3300)	70.6%	72.9%	+1.5% (2979)

* The Board of Education's criterion for limited-English proficiency is scoring below the 20th percentile on the Language Assessment Battery (LAB).

** The expanded criteria for limited-English proficiency are: scoring between the 20th and 39th percentiles on the LAB, or taking a standardized achievement test in an alternate-language format.

Hispanic limited-English proficient students. Student records were coded to identify those with Hispanic surnames, and the data were reanalyzed in order to assess the effects of being Hispanic vs. being limited-English proficient. Table 5-16 shows results of this analysis. Of the students who met the Board of Education's criterion for limited-English proficiency, 275 or 82% were identified as Hispanic. Of the students who did not meet the Board's criterion, 1831 or 47% were identified as Hispanic. As Table 5-16 shows, all four groups of students -- non-Hispanic and Hispanic non-LEP students, and non-Hispanic and Hispanic LEP students, had comparable rates of prior year attendance (76-77%). However, LEP Hispanic students had lower program year attendance (72%) than either their non-Hispanic counterparts who were also LEP, or all other non-LEP students, Hispanic or not. While non-Hispanic LEP students gained slightly in attendance, Hispanic students lost 5 percentage points in average attendance. The attendance decline for non-LEP students was about the same for both Hispanic and non-Hispanic students (about -3%).

Hispanic LEP students had a lower rate of prior year courses passed than all other students (63%). During the program year, however, they had larger gains than any other group. Hispanic LEP students gained 8.5% in courses passed, compared to 6.2% for non-Hispanic LEP students, 2.2% for Hispanic students who were not identified as LEP, and 0.5% for all other students.

The second panel of Table 5-16 shows attendance and courses passed rates for non-Hispanic and Hispanic students who met the more expanded definition of limited-English proficiency (scoring between the 20th and 39th percentile on the Language Assessment Battery or taking a standardized achievement test in an alternate language). Here we see that the attendance change for non-Hispanic and Hispanic students who were not limited-English proficient differed by only a percentage point (-2.6% vs. -3.8%), and that of non-Hispanic and Hispanic students who met the expanded LEP criterion also differed by only a percentage point (-5.8% vs. -4.7%). Hispanic students had greater gains in courses passed relative to their non-Hispanic counterparts, whether they were LEP or not.

The greatest contrast between the first and second panels of Table 5-16 concerns the course performance of students who met the Board's criterion for LEP status compared to those who met an expanded criterion. The latter group lost seven to eight percentage points more in courses passed than the students officially designated as limited-English proficient, whether or not they were Hispanic. Once again, we suspect that students identified as limited-English proficient by the Board of Education have access to special instructional services. The other students do not, and their course performance appears to suffer accordingly.

TABLE 5-16

Changes in Attendance and Courses Passed
for Limited-English Proficient Students,
by Hispanic Surname
DPP Middle Schools, 1987-88

Group	Average 1986-87 Attend.	Average 1987-88 Attend.	Average Change (N)	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Average Change (N)
Students meeting BOE criterion for LEP status*	76.3%	72.9%	- 4.1% (318)	63.9%	72.0%	+ 8.1% (259)
Non-Hispanic	76.6%	78.0%	+ 1.5% (57)	68.1%	73.0%	+ 6.2% (48)
Hispanic	76.2%	71.9%	- 5.3% (261)	63.1%	71.8%	+ 8.5% (211)
Students meeting expanded criteria for LEP status**	74.2%	69.2%	- 5.3% (490)	67.9%	71.2%	- 0.3% (336)
Non-Hispanic	73.4%	68.0%	- 5.8% (263)	66.1%	70.9%	- 0.7% (169)
Hispanic	75.1%	70.5%	- 4.7% (227)	70.0%	71.4%	+ 0.1% (167)
Students meeting either criteria for LEP status	75.0%	70.7%	- 4.8% (808)	66.3%	71.5%	+ 3.3% (595)
Non-Hispanic	74.0%	69.8%	- 4.5% (320)	66.5%	71.4%	+ 0.8% (217)
Hispanic	75.7%	71.3%	- 5.0% (488)	66.1%	71.6%	+ 4.8% (378)
Students meeting no criterion for LEP status	78.0%	75.1%	- 3.1% (3330)	70.6%	72.9%	+ 1.5% (2979)
Non-Hispanic	77.7%	75.2%	- 2.7% (1767)	69.6%	70.8%	+ 0.7% (1543)
Hispanic	78.3%	75.1%	- 3.6% (1563)	71.7%	75.2%	+ 2.6% (1436)

* The Board of Education's criterion for limited-English proficiency is scoring below the 20th percentile on the Language Assessment Battery (LAB).

** The expanded criteria for limited-English proficiency are: scoring between the 20th and 39th percentiles on the LAB, or taking a standardized achievement test in an alternate-language format.

Finally, the third panel of Table 5-16 shows outcomes for all students who met one or the other criterion for limited-English proficiency and all those who did not, broken down by whether students were or were not Hispanic. We see that the change in attendance for Hispanic and non-Hispanic students was roughly comparable in each group (LEP and non-LEP), and that the course performance for Hispanic students was better than that for their non-Hispanic counterparts. Among the non-LEP students, Hispanic students gained 2.5% in courses passed, compared to gains of 0.7% for non-Hispanic students. Among the LEP students, the gain for Hispanic students was 4.8%, compared to 0.8% for other students. However, the proportion of courses passed in 1987-88 was slightly lower for LEP Hispanic students (72%) than for non-LEP Hispanics (75%).

Overall, these findings suggest that among this program population, Hispanic student performance is equal to or better than that of other students, but that Hispanic students with language difficulties did not do as well as Hispanic students who did not have language difficulties.

Outcomes for students meeting different program eligibility criteria. It will be recalled that students were enrolled in the Dropout Prevention Program by virtue of having met at least one of a set of program eligibility criteria; one relevant criterion for each student was noted on the MSSR form, even though more than one might have been applicable. Table 5-17 shows the average 1987-88 attendance rate and change over 1986-87 attendance for students in each category of program eligibility.

Since the numbers of students in each category are skewed, with the majority of students entering the program under the two major attendance criteria, the outcomes for each category must be compared with caution. Nevertheless, at least two patterns do emerge. First, the closer to the program year that an "attendance problem" occurred and was used as the reason for program enrollment, the more attendance fell. The attendance of students selected on the basis of just their Spring, 1987, attendance tended to fall further (-3.8%) than that for students selected on the basis of their full-year attendance in 1986-87 (-2.1%). Similarly, the attendance of students selected because of their Fall, 1987, attendance fell even further (-10.6%).

Relatively few students were enrolled under the various criteria that combined two or more problems, including poor attendance, low reading scores, course failures, and the like. In general, patterns are not strong enough to indicate that these students had appreciably lower attendance than other students. The one exception is the group of students (N=190) who did not meet the attendance eligibility cutoff but who were chosen for two other reasons; these students had a drop in attendance of

TABLE 5-17

Attendance Outcomes for Students Meeting Different Program Eligibility Criteria, DPP Middle Schools, 1987-88

Selection Criterion	Average 1986-87 Attendance	Average 1987-88 Attendance	Change	(N)
1. 30-74 absences in 1986-87	73.6%	71.7%	-2.9%	(3251)
2. 15-37 absences, Spring 1987	82.8%	79.4%	-2.1%	(1703)
3. 25-29 absences in 1986-87 and:	85.0%	80.9%	-3.8%	(556)
a) Participant in 1986-87 AIDP or DPP program	82.6%	80.8%	-4.0%	(39)
b) 1987 DRP test score at or below 35th %ile	83.4%	80.5%	-2.0%	(136)
c) 2+ major subject failures in 1987	83.4%	80.5%	-2.7%	(38)
d) 20+ days late, 1986-87	82.4%	82.9%	+0.6%	(37)
e) Two or more years overage for grade	85.5%	83.0%	+0.7%	(6)
f) 20+ half-day absences in 1986-87	79.8%	85.0%	+5.1%	(4)
g) LEP-entitled	84.2%	84.3%	+0.1%	(6)
4. 22-25 absences in 1986-87 and participant in 1986-87 AIDP/DPP	84.0%	82.2%	-1.8%	(50)
5. Does not meet absence criteria but chosen because of two or more of the following:	87.9%	83.2%	-5.2%	(190)
a) 1987 DRP score at or below the 35th %ile				
b) 1987 Gates eligible				
c) 2+ subject failures in 1986-87				
d) student in temporary housing				
e) 20+ days late in 1986-87				
f) 2+ years overage for grade				
g) LEP entitled				
6. LTA 1986-87 and in school 10 or more days in Sept-Oct., 1987	48.6%	51.8%	+2.2%	(18)
7. Absent 10+ days in Sept-Oct 1987, but not LTA or No-Show	77.7%	64.8%	-12.4%	(24)
8. 15-37 absences, Sept-Jan 1987-88	84.0%	71.6%	-10.6%	(91)
9. 12-14 absences, Sept-Jan 1987-88 and 2+ subject failures in the second marking period	87.1%	80.0%	- 7.1%	(12)
10. Principal's discretion	77.8%	76.4%	- 2.2%	(318)
11. Participated in AIDP/DPP in 1986-87 (Transitional)	83.6%	73.9%	-10.2%	(23)

over five percent. These students had prior year attendance (88%) that was better than that for all other categories of students, so this outcome represents a serious change in their performance.

Over five hundred students were enrolled in the Dropout Prevention Program under "principal's discretion." These students had an average prior year attendance rate of 78%, about the same as the mean for the entire population of program students, and their attendance change of -2.2% was also in line with the other students.

Fewer than 150 students were enrolled in the program on the basis of prior year participation in the AIDP or DPP programs (a future report will ascertain whether any more students had in fact participated). These students had, on average, greater attendance losses than other program students: -4% for students with low 1986-87 attendance and AIDP/DPP participation, and -10% for students with past AIDP/DPP participation who were making a transition to the regular school program (because of improved attendance) during 1987-88. However, past program students who had moderate attendance problems (22-25 absences) in 1986-87 did slightly better than the other students, with an average attendance change of -2%.

Table 5-18 shows the courses passed by students in different categories of program eligibility. Students varied more on this dimension, with prior year rates ranging from 46% for the few students who had been long-term absentees (LTAs) in 1986-87 to 89% for the small group of students with 25-29 prior year absences and either LEP status or excessive half-day absences. Students who met no attendance criterion but did have two or more other risk factors had prior year attendance of 64%, below the mean for all students; students selected under the principal's discretion had average prior year courses passed of 66%.

The half of the program population selected solely on the basis of poor prior year attendance had essentially no change in their course passing performance. There was no consistency in the performance of students who had been in AIDP/DPP the prior year: transitional students had a 9 percent decline in courses passed, while low attendance/prior program students had a 9 percent increase and moderate attendance/prior program students had a 6 percent increase. The most positive changes in courses passed were registered by students entered under principal's discretion (+11%), students not meeting an attendance criterion but having two or more other risk factors (+12%), and students with poor attendance and two or more prior failures (+28%).

Students selected because of Fall, 1987, attendance tended to do poorly in courses passed over the year, with an average decline of -6%. Students with low reading scores also lost

TABLE 5-18

Courses Passed Outcomes for Students Meeting Different Program Eligibility Criteria, DPP Middle Schools 87-88

Selection Criterion	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Change	(N)
1. 30-74 absences in 1986-87	68.0%	69.3%	+ 0.04%	(1433)
2. 15-37 absences, Spring 1987	77.4%	77.9%	+ 0.1%	(486)
3. 25-29 absences in 1986-87 and:				
a) Participant in 1986-87 AIDP or DPP program	73.9%	80.1%	+ 8.7%	(37)
b) 1987 DRP test score at or below 35th %ile	74.9%	72.4%	- 4.6%	(116)
c) 2+ major subject failures in 1987	48.8%	76.5%	+28.0%	(35)
d) 20+ days late, 1986-87	80.0%	85.6%	+ 4.0%	(34)
e) Two or more years overage for grade	82.5%	69.0%	-11.0%	(5)
f) 20+ half-day absences in 1986-87	88.9%	96.3%	+11.1%	(3)
g) LEP-entitled	88.6%	70.0%	-20.3%	(5)
4. 22-25 absences in 1986-87 and participant in 1986-87 AIDP/DPP	81.5%	87.4%	+ 6.4%	(47)
5. Does not meet absence criteria but chosen because of two or more of the following:				
a) 1987 DRP score at or below the 35th %ile	63.8%	78.6%	+12.4%	(190)
b) 1987 Gates eligible				
c) 2+ subject failures in 1986-87				
d) student in temporary housing				
e) 20+ days late in 1986-87				
f) 2+ years overage for grade				
g) LEP entitled				
6. LTA 1986-87 and in school 10 or more days in Sept-Oct., 1987	46.2%	44.4%	- 0.5%	(14)
7. Absent 10+ days in Sept-Oct 1987, but not LTA or No-Show	79.1%	64.6%	- 6.6%	(25)
8. 15-37 absences, Sept-Jan 1987-88	72.2%	67.1%	- 6.1%	(124)
9. 12-14 absences, Sept-Jan 1987-88 and 2+ subject failures in the second marking period	72.3%	75.9%	+ 5.0%	(11)
10. Principal's discretion	65.9%	77.5%	+10.6%	(383)
11. Participated in AIDP/DPP in 1986-87 (Transitional)	85.3%	81.6%	- 9.0%	(22)

ground, with an average decline of -4%. For all other groups of students, the group size is too small to warrant the drawing of conclusions.

Students with multiple risk characteristics. As was discussed in Chapter Two, a number of students appeared to be at special risk because they had more than one of the following factors present: 30 or more absences in 1986-87; 20 or more half-day absences in 1986-87; reading two or more years below grade level; two or more course failures in 1986-87; two or more years overage for grade; meets Board criteria for limited-English proficiency; other indicator of limited-English proficiency; and long-term absentee in 1986-87.

Table 5-19 shows the attendance and courses passed results for students who had different numbers of risk factors present. Since several of the risk factors directly concern prior year attendance or course performance, it is no surprise that students with none or only one risk factor present had much better prior year histories than other students: average prior year attendance was 82% and average prior year proportion of courses passed was 83% for these students. In contrast, students with four or more risk factors had average prior year attendance of 68% and average prior year proportion of courses passed of just 39%. Students with two or three risk factors present were in the middle on both measures, with average prior year attendance of 75% and average prior year courses passed of 60%.

Students in all three groups declined in attendance in 1987-88. The decline was greatest for those students with the most risk factors. Students with four or more risk factors had an average attendance change of -5.9%, compared to a loss of -2.6% for students with 0-1 risk factors and a loss of -3.8% for students with 2-3 risk factors.

The results for courses passed show a different pattern. Students with just 0-1 risk factors declined slightly in proportion of courses passed (-3.3%), while students with 4+ risk factors gained +15.9% in courses passed. Among the students with 0-1 risk factors, 29% showed an increase in the proportion of courses passed, while 33% showed a decline. In contrast, among the students with four or more risk factors, 53% showed an increase in courses passed, while 26% showed a decline. Since students with 4+ risk factors had much lower prior year course performance than other students, this may represent some regression to the mean. It may also reflect a tendency for teachers to help students with very poor academic records to pass courses, perhaps by broadening grading standards in order to encourage continued improvement. The observation that students with multiple risk factors improve more in courses passed even while they have greater declines in attendance may also support the observation, stated elsewhere, that teachers and schools have

TABLE 5-19

Attendance and Courses Passed Outcomes
for Students with Multiple Risk Characteristics
DPP Middle Schools, 1987-88

Number of Risk Characteristics	Average 1986-87 Attend.	Average 1987-88 Attend.	Average Change (N)	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Average Change (N)
OVERALL	77.2%	74.0%	- 3.5% (3987)	68.1%	72.2%	+ 3.2% (3335)
0-1 factors	81.8%	78.9%	- 2.6% (1731)	83.0%	79.7%	- 3.3% (1539)
2-3 factors	74.7%	71.4%	- 3.8% (1898)	59.5%	67.8%	+ 7.5% (1522)
4 or more factors	68.4%	62.4%	- 5.9% (358)	39.0%	55.0%	+15.9% (274)

more control over the construction of course grades than over attendance rates.

Overall, the figures confirm the notion that there is a relation between having multiple risk factors and low attendance and course performance.

Students in special instructional components of DPP. As was described in detail in Chapter Three, one striking program feature that made a great deal of difference in how students experienced school in general and the Dropout Prevention Program in particular, especially in terms of how frequently and comprehensively they received the full range of program services, was the plan in 1987-88 to enroll program students in state-funded PCEN remedial education classes. The students who participated in PCEN classes were typically grouped together in a math, reading, and/or writing remediation class; the fact that they were grouped together made them more accessible to program staff for individual and group counseling, attendance outreach, and other services.

Some schools also provided enrichment classes for students, in many cases for those students who did not meet PCEN eligibility requirements. These enrichment classes also served the function of grouping program students together and making it easier to deliver services to them.

Table 5-20 shows the attendance outcomes for students, according to which special instructional component they participated in. The top panel shows outcomes for program students overall, and then for all students enrolled in PCEN classes and all students enrolled in enrichment classes. Since there is some overlap in these two categories (i.e., some students were enrolled in both PCEN and enrichment), the middle panel divides students into four mutually exclusive categories: students who received PCEN classes only, enrichment classes only, both, or neither. Finally, in the last panel, students are reclassified as being in an instructional cluster if they participated in PCEN or enrichment classes or if they were enrolled in School 29. School 29 had a block-scheduled academic program for all DPP students; these students were accessible to program staff in the same way that PCEN or enrichment students in other schools were accessible. Table 5-21 is organized the same way to show courses passed outcomes.

The students in PCEN classes had attendance and courses passed outcomes that were slightly better than the mean scores for program students overall. The average attendance change for PCEN students was -1.4%, compared to the DPP average of -3.4%; the change in courses passed for PCEN students was +2.2%, compared to +1.6% for the program overall.

TABLE 5-20

Attendance Outcomes for Students
in PCEN/Remedial or Enrichment Classes or Clustered Together
DPP Middle Schools, 1987-88

	Average 1986-87 Attendance	Average 1987-88 Attendance	Average Change Over 1986-87 (N)	Percent Who Improved
OVERALL DPP	77.4%	74.3%	-3.4% (4138)	47.4%
All PCEN/Remedial	77.7%	76.4%	-1.4% (1839)	51.5%
All Enrichment	79.0%	80.1%	+0.7% (682)	56.9%
PCEN Alone	77.8%	76.2%	-1.7% (1641)	50.6%
Enrichment Alone	79.9%	80.7%	+0.5% (484)	56.0%
Both PCEN and Enrichment	76.8%	78.4%	+1.3% (198)	59.1%
Neither	76.5%	70.5%	-6.6% (1815)	41.0%
Cluster*	78.1%	77.2%	-1.2% (2350)	52.0%
No Cluster	76.5%	70.6%	-6.5% (1788)	41.3%

* "Cluster" includes all students who were enrolled in a PCEN or Enrichment class, along with all students in School 29 who were block-programmed together.

TABLE 5-21

Courses Passed Outcomes for Students in PCEN/Remedial or Enrichment Classes or Clustered Together DPP Middle Schools, 1987-88

	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Average Change 1986-87	(N)	Percent Who Passed the Same Proportion of Courses	Percent Who Passed More Courses
OVERALL DPP	69.8%	72.7%	+1.8	(3574)	31.3%	37.1%
All PCEN/Remedial	69.5%	71.9%	+2.2	(1860)	25.3%	40.6%
All Enrichment	72.1%	81.6%	+9.2	(721)	35.9%	41.5%
PCEN Alone	70.6%	71.2%	+0.3	(1645)	25.6%	38.5%
Enrichment Alone	76.9%	83.1%	+5.9	(506)	41.5%	35.0%
Both PCEN and Enrichment	60.8%	77.8%	+17.1	(215)	22.8%	56.7%
Neither	68.3%	69.5%	-0.4	(1208)	36.2%	32.7%
Cluster*	71.0%	74.4%	+3.0	(2366)	28.7%	39.4%
No Cluster	68.4%	69.5%	-.4	(1208)	36.2%	32.7%

* "Cluster" includes all students who were enrolled in a PCEN or Enrichment class, along with all students in School 29 who were block-programmed together.

Students enrolled in enrichment classes did even better. Their average attendance change was +0.7%, and their average change in courses passed was +9.2%. It should be recalled from the discussions in previous chapters that clustered students overall had attendance rates in September, October, and November, 1987, that were considerably higher than the rates for other students. Since these high rates of attendance occurred in many cases *before* students began to participate in remedial or enrichment classes, the gains in annual attendance cannot be due entirely to effects of the enrichment or remedial classes.

When students are divided into mutually exclusive categories (shown in the second panel of Tables 5-20 and 5-21), it appears that the strongest gains were experienced by students enrolled in both PCEN and enrichment classes. These students showed an attendance gain of +1.3%, and a gain in courses passed of +17.1%. Students who received neither PCEN nor enrichment classes had markedly lower outcomes: attendance change of -6.6%, and courses passed change of -0.4%.

When PCEN and enrichment students are combined with all the students from School 29 into the "Cluster" variable (third panel of Tables 5-20 and 5-21), these students show outcomes that are better than the averages for DPP overall and better than the averages for students "Not Clustered." The average attendance change for clustered students was -1.2%, compared to -6.5% for students not clustered. The average change in courses passed for clustered students was +3.0%, compared to -0.4% for non-clustered students.

Overall, students who were grouped into either a remedial/PCEN or an enrichment class tended generally to show slightly better than average changes in attendance and courses passed. The strongest results were found for students receiving both remediation and enrichment, followed by students receiving enrichment alone.

Recalling that there was a difference in the courses passed outcome for the two program models (+2.8% for the School-Alone model vs. -0.3% for the CBO model), we can now examine whether that differential is related to the models having different patterns of enrollment in PCEN and/or enrichment classes. Table 5-22 shows the attendance and courses passed outcomes for the two program models, broken down by whether students participated in PCEN/remedial classes, enrichment classes, both, or neither. As this table indicates, most of the gain in courses passed for the School-Alone model can be attributed to students in enrichment classes, either with or without PCEN remediation. The gain of 6.6% for students in enrichment classes only, and the gain of 17.1% for students in both PCEN and enrichment classes, contributed to the School Alone model's high outcomes relative to the CBO/School model.

TABLE 5-22

Changes in Attendance and Courses Passed for Students in School-Alone and CBO Models by Whether They Participated in PCEN or Enrichments Classes DPP Middle Schools, 1987-88

Model/ Program	Average 1986-87 Attend.	Average 1987-88 Attend.	Average Change	(N)	Average 1986-87 Courses Passed	Average 1987-88 Courses Passed	Average Change	(N)
OVERALL	77.4%	74.3%	-3.4%	(4138)	69.8%	72.7%	1.8%	(3574)
School-Alone Model	77.7%	74.7%	-3.4%	(2864)	70.1%	74.3%	2.8%	(2502)
Neither	76.8%	69.7%	-8.0%	(1121)	68.1%	69.3%	-1.7%	(718)
PCEN only	78.0%	76.7%	-1.4%	(1073)	71.1%	72.7%	1.1%	(1075)
Enrich only	80.0%	81.0%	0.7%	(472)	76.8%	83.7%	6.6%	(494)
PCEN & Enrich	76.8%	78.4%	1.3%	(198)	60.8%	77.8%	17.1%	(215)
CBO/School Model	76.6%	73.3%	-3.5%	(1274)	69.2%	68.8%	-0.3%	(1072)
Neither	75.9%	71.9%	-4.2%	(694)	68.7%	69.7%	1.5%	(490)
PCEN only	77.5%	75.1%	-2.5%	(568)	69.7%	68.3%	-1.3%	(570)
Enrich only	78.5%	71.3%	-7.2%	(12)	80.0%	56.7%	-23.3%	(12)

Standardized test scores for students in remedial classes. In the Dropout Prevention Program overall, students showed an average change of 4.4 units in their standardized reading test scores (DRP test). Expected reading score gains for students in grades six to eight are three to five units, according to testing personnel at the Board of Education. Thus, program students' test scores were in the range of expected achievement. However, since some program students received remedial reading instruction, it is important to examine whether that intervention had any impact on reading test scores.

Table 5-23 shows the gains in DRP reading test units for students who received various types of remedial instruction. Students who received reading remediation alone gained 5.9 DRP units, and students who had reading and math remediation gained 5.3 units. These figures suggest that reading remediation did have a positive effect on students' achievement test scores.

Standardized math achievement test scores were reported as national percentiles. Students in the Dropout Prevention Program were, on average, at the twenty-ninth percentile in math achievement in 1986-87 and at the twenty-seventh percentile in 1987-88. Students who had test scores both years showed a slight gain of +0.97 in their percentile scores. As Table 5-23 indicates, students who had math remediation only gained 0.97; students who had math and reading remediation gained 1.29; and the few students (N=20) with math and writing remediation gained 1.66 percentile points. The increases are not dramatic, but they suggest that students with combined math and language arts remediation have the greatest likelihood of showing improvement.

Attendance and Courses Passed Outcomes for Different Schools when Student Prior Performance is Taken into Account

Looking at the raw scores for attendance and courses passed in 1987-88 and the percentage changes over 1986-87 scores tells only part of the story of how well individual students and schools were doing. Student performance is a function of many different factors, including the student's own prior history of attendance and academic achievement, as well as characteristics of the school and dropout prevention program in which the student is enrolled. In order to account for all these factors together, we performed several analyses of program outcomes using multiple regression techniques.[6] Two analyses will be reported here, and

---

6. Multiple regression produces an algebraic equation of the form

$$O = (a*x) + (b*y) + (c*z) + k,$$

where O stands for an outcome of interest, for example 1987-88

TABLE 5-23

Performance on Standardized Tests
for Students Who Received PCRN Remediation
DPP Middle Schools, 1987-88

Type of Remediation Received	READING ACHIEVEMENT: Average DRP Percentile Score 1987	Average DRP Percentile Score 1988	Average Change (N)	MATH ACHIEVEMENT: Average MAT Percentile Score 1987	Average MAT Percentile Score 1988	Average Change (N)
OVERALL	41.6	43.1	+ 4.4 (3728)	29.3	27.2	+ 1.0 (3393)
Reading Remediation	33.9	39.1	+ 5.9 (300)	25.8	22.0	+ 0.7 (264)
Math Remediation	44.2	45.0	+ 4.1 (791)	27.9	27.2	+ 1.0 (715)
Writing Remediation	43.9	45.5	+ 4.7 (112)	29.9	28.5	+ 0.9 (92)
Reading & Math	37.3	40.6	+ 5.3 (257)	20.7	20.5	+ 1.3 (244)
Reading & Writing	35.0	40.0	+ 6.0 (1)	16.0	--	+ 0.1 (1)
Math & Writing	48.6	41.8	+ 0.5 (25)	19.0	22.9	+ 1.7 (20)
Reading, Math, Writing	45.8	41.0	+ 2.6 (129)	33.6	26.1	+ 0.4 (120)
No Remediation	41.8	43.2	+ 4.4 (2113)	31.1	28.8	+ 1.0 (1937)

additional analyses are discussed in the following chapter.

In our first regression analysis, we used prior year attendance as the control variable, school attended as the predictor variable, and present year attendance as the outcome. Coefficients for the equation that was produced are shown in Table 5-24. Prior year attendance is statistically the most significant factor in predicting what a student's attendance will be. (Of course, prior year attendance itself may have been influenced by the school the student attended.) This is confirmed in a statistical test which determined that prior year attendance accounted for 19.6% of the variation in present year attendance, compared to schools accounting for 2.1% of the variation. This latter figure is small but not trivial; it indicates that schools themselves influenced the attendance of their program students, even after the prior year attendance of students was taken into account. The size of the coefficients for different schools ranged from .1083 for School 17 to 0 for School 14. These figures can be interpreted as follows: given two students with identical prior year attendance, the 1987-88 attendance of the student in School 26 would be 10.8 percentage points higher than the attendance of the student in School 14. Eleven of the schools had coefficients that did not differ significantly from a value of zero; the interpretation of these is that students with identical prior year attendance would have 1987-88 attendance rates that were essentially the same in any of these eleven schools.

Table 5-24 also shows the ranking of schools on both the raw scores for attendance change and the regression analysis.[7]

---

attendance, and x, y, and z stand for various predictors, for example 1986-87 attendance, number of group guidance sessions, and school attended. (K is a constant number that balances the equation.) The multiple regression analysis gives the values of the coefficients a, b, and c. (Standardized beta coefficients are also produced; these allow comparison between variables with different scales of measurement.) When these numbers are multiplied by given values of the predictors, they produce a predicted outcome. So, for example, it is possible to use a multiple regression equation to determine what would be the expected attendance in 1987-88 of a student whose 1986-87 attendance had been 77%, who participated in 13 group guidance sessions, and who attended School 17. It must be kept in mind that multiple regression provides a statistical estimate of the association of many variables with an outcome variable, but it does not automatically establish causality.

7. Schools are ranked on the non-standardized and the standardized coefficients; slight differences in rankings are attributable to differences in the sample sizes of the different schools.

TABLE 5-24

Coefficients for Regression Equation Predicting 1987-88 Attendance from School Attended After Controlling for Prior Year Attendance DPP Middle Schools, 1987-88

School	Regression Coefficient	Rank	Standardized Regression Coefficient^	Rank		Average Attendance Change	Rank	Average 1987-88 Attendance
17	0.1083**	1	0.0925**	3	:	+3.0%	1	77.4%
19	0.1003**	2	0.0749**	6	:	+2.3%	2	76.9%
29	0.0928**	3	0.0935**	2	:	+1.0%	3	78.8%
21	0.0842**	4	0.0761**	5	:	-0.9%	7	80.5%
26	0.0834**	5	0.1003**	1	:	-0.3%	6	78.0%
25	0.0833**	6	0.0865**	4	:	-0.1%	4	77.7%
30	0.0802**	7	0.0670**	8	:	-0.1%	5	76.5%
28	0.0785**	8	0.0738**	7	:	-0.9%	8	76.9%
41	0.0534**	9	0.0587**	9	:	-3.2%	12	74.4%
34	0.0523*	10	0.0439*	16	:	-3.1%	11	73.6%
16	0.0515*	11	0.0382*	18	:	-4.2%	16	77.6%
33	0.0501**	12	0.0541**	11	:	-3.6%	15	74.7%
20	0.0500**	13	0.0542**	10	:	-3.6%	14	74.7%
38	0.0485*	14	0.0505*	12	:	-3.5%	13	73.7%
23	0.0483*	15	0.0434*	17	:	-2.4%	9	71.0%
35	0.0451*	16	0.0477*	15	:	-4.5%	18	75.2%
31	0.0433*	17	0.0490*	14	:	-4.3%	17	73.7%
36	0.0421*	18	0.0495*	13	:	-4.7%	19	74.2%
24	0.0405	19	0.0354	19	:	-2.8%	10	71.7%
22	0.0303	20	0.0273	21	:	-4.7%	20	70.7%
39	0.0293	21	0.0307	20	:	-5.7%	23	72.5%
37	0.0262	22	0.0206	23	:	-5.1%	21	71.2%
32	0.0233	23	0.0188	24	:	-5.9%	24	71.9%
18	0.0231	24	0.0231	22	:	-5.5%	22	70.7%
27	0.0217	25	0.0180	25	:	-6.7%	25	72.6%
15	0.0112	26	0.0103	26	:	-7.8%	28	73.6%
42	0.0087	27	0.0068	27	:	-7.7%	27	70.3%
40	0.0058	28	0.0051	28	:	-6.8%	26	66.7%
14	0	29	0	29	:	-9.0%	29	72.8%
ATT86-87	0.4424							

---

^ These are coefficients for values of the variable in standardized form (i.e., expressed in standard deviation units)

** Significant at the .01 level

* Significant at the .05 level

Schools at the high and low ends of the spectrum tended not to change position when the raw change scores were used rather than regression coefficients. That is, schools with high raw scores of attendance outcomes for students remained the schools with positive effects on student attendance even after the students' prior year attendance was taken into consideration. School 17 ranked highest in terms of both attendance change and the regression analysis. The same was true for schools at the low end: they tended to have the lowest raw scores on attendance for students, and to continue to do so even in regression analysis, after students' prior attendance was considered. Schools in the mid-range tended to shift position more, suggesting that the raw scores in these schools were more dependent on the nature of their student populations. For example, School 36 ranked 19th in terms of the raw scores for attendance change. But it ranked 13th in the regression equation, suggesting that a good portion of the average attendance drop in that school was due to the fact that many of the students had poor prior attendance.

Table 5-25 shows similar outcomes for the second regression analysis, concerning proportion of courses passed. In this case, prior year (1986-87) courses passed was used as the control variable and school attended was the predictor variable. Prior year courses passed accounted for 7% of the variance in 1987-88 courses passed, while school attended accounted for an additional 4.4%. There was considerably more variation in the school coefficients in this equation than in the attendance equation. The lowest coefficient was -0.05 for School 37, and the highest was .2479 for School 29. Given two students with identical 1986-87 courses passed, the 1987-88 course passing rate of the student in School 29 would be 30 percentage points higher than the rate for the student in School 37.

Overall, results indicate that course performance is associated more with what particular school a student attends than is attendance. This seems reasonable, since many factors which might contribute to academic performance are under the school's control, including the quality of instruction, appropriateness of curriculum, and grading practices.

Outcomes for Program Students and Comparison Group Students

As was noted at the beginning of this chapter, when assessing program effects, it is necessary to make a comparison between outcomes obtained for the program and outcomes that would be expected without the program. For this purpose, we used a comparison group of students, consisting of all students in each of the twenty-nine middle schools who met the base attendance-eligibility criterion for program participation (22-74 absences the prior year or more than 15 absences the prior semester) but who were not served by the program. Such a comparison group has

TABLE 5-25

Coefficients for Regression Equation Predicting 1987-88 Courses Passed from School Attended After Controlling for Prior Year Courses Passed DPP Middle Schools, 1987-88

School	Regression Coefficient	Rank	Standardized Regression Coefficient^	Rank		Average Change in Courses Passed	Rank	Average 1987-88 Courses Passed
29	0.2479**	1	0.1330**	1	:	+27.6%	1	87.7%
21	0.1976**	2	0.1076**	2	:	+11.2%	4	86.3%
16	0.1676**	3	0.0783**	4	:	+17.0%	2	78.8%
38	0.1670**	4	0.0937**	3	:	+ 5.7%	11	83.5%
35	0.1318**	5	0.0718**	6	:	- 1.1%	16	81.0%
26	0.1311**	6	0.0695**	7	:	- 3.1%	20	82.5%
17	0.1286**	7	0.0565**	11	:	+ 7.4%	6	79.8%
36	0.1283**	8	0.0764**	5	:	+ 5.4%	12	78.8%
25	0.1180**	9	0.0683**	9	:	+ 9.7%	5	75.4%
19	0.1154**	10	0.0518**	13	:	+12.2%	3	74.2%
41	0.1102**	11	0.0684**	8	:	+ 6.6%	8	76.3%
24	0.0995**	12	0.0581**	10	:	+ 4.1%	13	75.0%
34	0.0975*	13	0.0537*	12	:	+ 5.8%	10	74.8%
33	0.0857*	14	0.0481*	14	:	+ 1.2%	15	74.5%
23	0.0730	15	0.0337	16	:	- 5.5%	24	74.2%
20	0.0600	16	0.0352	15	:	- 3.3%	21	72.8%
42	0.0441	17	0.0206	17	:	- 4.0%	22	68.9%
15	0.0373	18	0.0200	18	:	+ 6.8%	7	65.9%
28	0.0329	19	0.0185	19	:	- 7.5%	26	70.4%
39	0.0302	20	0.0172	20	:	- 2.0%	18	68.1%
40	0.0224	21	0.0104	21	:	- 2.9%	19	66.9%
27	0.0102	22	0.0048	22	:	- 1.8%	17	65.7%
18	0.0015	23	0.0009	23	:	+ 2.9%	14	62.2%
31	0	24	0	24	:	-10.9%	29	67.1%
30	-0.004	25	-0.0018	25	:	- 4.2%	23	63.6%
22	-0.008	26	-0.0051	26	:	- 8.6%	27	64.9%
14	-0.0161	27	-0.0102	27	:	-10.8%	28	63.8%
32	-0.0272	28	-0.0137	28	:	+ 6.1%	9	56.9%
37	-0.0500	29	-0.0231	29	:	- 6.6%	25	59.2%
SUB8687	0.2587							

---

^ These are coefficients for values of the variable in standardized form (i.e., expressed in standard deviation units)

** Significant at the .01 level

* Significant at the .05 level

several drawbacks. First, not all program students themselves met the attendance criterion (some were enrolled for other reasons), and so the program and comparison group students, as a whole, are not strictly equivalent on the basis of prior year attendance. Furthermore, because the comparison group is constructed on the basis of only one variable -- prior year attendance -- the two groups may differ on other important variables, such as prior year course performance. This is particularly troublesome because program students were not randomly assigned to the program; a good deal of self-selection or otherwise deliberate selection into the program took place. Finally, the number of comparison group students varies considerably from school to school, depending on the size of the at-risk population in each school relative to the number of students the program could serve, and this makes comparisons across schools more tenuous. We thus caution that the results for comparison group students should be interpreted as rough approximations of how students would perform in the absence of the Dropout Prevention Program.

A total of 2285 students were included in the comparison group sample. The number of comparison group students per school ranged from just 12 in School 14 to 227 in School 17; eleven of the twenty-nine schools had more than 100 students in the comparison group. The average prior year (1986-87) attendance of these students was 75.2%. In 1987-88, these students' average attendance fell to 72.3%, with an average decline of -2.9%. On a school-by-school basis, the largest attendance decline for comparison group students was -10.6% in School 28 (N=36), and the largest gain in attendance was 0.9% in School 16 (N=31).

The decline in attendance for comparison group students is slightly smaller (-2.9%) than the outcome obtained for program students (-3.4%). However, since not all program students met the attendance eligibility criterion, on the basis of which the comparison group was selected, a more reasonable comparison would be between the comparison group and only those program students who met the attendance-eligibility criterion. Table 5-26 shows results of this analysis, overall, by model, and by school.

The attendance-eligible program students had an average decline in attendance of -2.6%, essentially no different than that for the comparison group. Comparison group students in School-Alone and CBO models had virtually the same attendance decline (-2.9% and -2.8%, respectively). These results were similar to those for attendance-eligible program students, although program students in the School-Alone model did very slightly better than CBO students (-2.5% vs. -2.8%).

Some differences between program and comparison group students emerge within individual schools. However, since little is known about why some students were enrolled in the Dropout

TABLE 5-26

Attendance Outcomes for Comparison Group Students and for Program Students Meeting Attendance-Eligibility Criteria DPP Middle Schools, 1987-88

School	-- COMPARISON GROUP STUDENTS --- Average 1986-87 Attend.	Average 1987-88 Attend.	Average Change (N)	ATTENDANCE-ELIGIBLE ------ PROGRAM STUDENTS ------- Average 1986-87 Attend.	Average 1987-88 Attend.	Average Change (N)
OVERALL	75.0%	72.6%	-2.6% (3463)	75.2%	72.3%	-2.9% (2279)
School-Alone Model	73.9%	71.1%	-2.9% (1423)	75.2%	72.9%	-2.5% (2349)
14	75.8%	68.8%	-7.0% (104)	70.5%	70.5%	-0.0% (12)
15	74.3%	67.1%	-7.2% (92)	72.5%	72.3%	-0.1% (28)
17	74.9%	78.7%	4.0% (102)	77.1%	74.9%	-2.2% (225)
18	74.5%	69.7%	-5.4% (153)	70.8%	69.9%	-0.9% (102)
20	76.6%	74.1%	-2.6% (160)	70.0%	67.8%	-2.2% (98)
21	76.1%	77.0%	0.1% (91)	77.6%	82.0%	4.4% (19)
24	70.9%	68.7%	-2.8% (111)	73.6%	69.5%	-4.1% (113)
25	75.6%	76.8%	0.8% (148)	78.7%	77.8%	-0.8% (63)
28	76.2%	75.5%	-0.8% (111)	72.9%	62.3%	-10.6% (36)
29	74.6%	76.7%	1.7% (134)	68.7%	67.6%	-1.1% (146)
31	75.1%	73.4%	-1.8% (159)	83.0%	82.4%	-1.8% (41)
33	77.0%	74.4%	-2.6% (162)	74.4%	72.3%	-2.2% (163)
34	71.9%	70.3%	-1.6% (81)	80.5%	74.9%	-5.6% (39)
35	76.1%	71.8%	-4.2% (128)	72.4%	69.2%	-3.1% (49)
36	76.5%	72.3%	-4.2% (179)	83.6%	78.9%	-4.7% (83)
38	74.9%	72.2%	-2.8% (142)	66.5%	59.8%	-6.7% (112)
39	75.5%	69.5%	-6.0% (137)	62.8%	56.5%	-6.0% (29)
41	73.6%	72.7%	-2.2% (155)	78.1%	74.6%	-3.5% (65)
CBO/School Model	77.2%	74.4%	-2.8% (856)	74.8%	72.0%	-2.8% (1114)
16	74.5%	72.3%	-2.5% (53)	82.6%	83.4%	0.9% (31)
19	73.9%	76.5%	2.4% (80)	77.6%	73.7%	-3.9% (104)
22	74.7%	70.4%	-4.3% (120)	78.2%	72.1%	-6.1% (106)
23	72.5%	69.9%	-2.3% (117)	73.1%	72.5%	-0.6% (100)
26	77.6%	77.8%	0.2% (220)	77.7%	75.1%	-2.6% (101)
27	76.4%	69.9%	-6.8% (86)	81.0%	77.0%	-4.0% (54)
30	76.2%	76.4%	0.1% (104)	74.5%	74.9%	0.4% (83)
32	70.8%	63.9%	-6.9% (68)	79.6%	77.2%	-2.4% (70)
37	73.3%	68.9%	-4.4% (85)	73.3%	71.6%	-1.7% (42)
40	72.6%	68.3%	-4.3% (106)	78.1%	74.7%	-3.3% (118)
42	75.6%	67.9%	-7.4% (75)	75.8%	70.4%	-5.4% (47)

Prevention Program and others were not, comparisons between the two groups of students should be made only by persons familiar with the student selection processes and other pertinent details of individual school contexts.

Although there were slight differences in attendance outcomes for the comparison group students and attendance-eligible program students when the groups were broken down according to grade, overage, and sex, they were too small to be meaningful. There was one exception. The attendance-eligible program students who met an expanded definition of limited-English proficiency had an average attendance change of +0.1% (N=105). Similar students in the comparison group had a decline of -5.6% (N=75). It is possible that these students, who did not qualify for bilingual instructional services, did better with the special attention they received through the Dropout Prevention Program.

In general, then, the limited evidence available about the performance of comparable, non-program students suggests that there is no substantive difference in attendance change for program and comparison group students. While it would appear therefore that the program is having no effect, unfortunately non-measured differences between the two groups might account for the lack of evidence for a program effect.

It is extremely regrettable that we do not have courses passed data on a comparison group of students. Evidence from dropout programs in New York and elsewhere seems to indicate that student attendance is much more intractable than student course performance, so that one might expect to see larger differences in courses passed outcomes for program and comparison group students. However, with only a few exceptions, the Dropout Prevention Program did not have a strong academic thrust in 1987-88; since their classroom experiences were not substantially different from those of other students, it is therefore not likely that the academic performance of program students differed much from that of comparison group students.

Student Promotion to the Next Highest Grade

We turn finally to the last performance objective for the Dropout Prevention Program. Chancellor's Circular #37 stated that at least fifty percent of the program students should be promoted to the next highest grade after the 1987-88 school year. This objective was easily met for the program overall and for individual schools. Of the students with data, 92.5% were promoted, and 7.5% were held back in their present grade level. Schools ranged from promoting 73 percent to promoting 100 percent of their program students.

There was relatively little difference in the promotion rates for students at different grade levels. Ninety-one percent of the seventh graders were promoted, compared to 93 percent of the eighth graders and 91 percent of the ninth graders.

The passing rate for students coming into the 1987-88 school year had also been high: 87 percent of the students were promoted and 13 percent were held back after 1986-87. It is possible that the promotion rate following 1987-88 was higher than that for the year before because of the slight increase in courses passed by students.

In light of this evidence, one might conclude that the fifty percent cutoff for this performance objective is too low; perhaps the program should be expected to make it possible for ninety percent of program students to pass into the next grade each year, or should target this objective to students who had not been promoted the previous year.

Conclusion

Overall, program students in Year Three had a slight decline in attendance, and a slight increase in courses passed. Whether students were male or female, overage for grade, or had limited-English proficiency had some effect on their performance. The school in which they were enrolled appeared also to affect their outcomes, although there were few consistent differences in outcomes between the two program models.

Data on attendance for a comparison group suggests that there was no net effect of the program on student attendance beyond what would be expected in the absence of a program. However, there was considerable variation among schools on each measure; a few schools showed definite progress with their students. The next chapter will begin to combine the findings discussed here and in Chapters Three and Four in a discussion of how and why schools had different results with their students.

Chapter Six

EFFECTS OF PROGRAM SERVICES ON OUTCOMES

In this chapter we will report our efforts to find out how the services recorded in the Monthly Summary of Service Reports relate to attendance and courses passed outcomes. Following this, we will focus on characteristics of the program in middle schools which seemed to make the strongest positive contribution to student outcomes. Finally, we will comment on what further research might be necessary to establish how services relate to outcomes.

Analyses Using MSSR Data

The contribution of services to attendance after controlling for prior year attendance. As we did for the Year Two Report, we carried out a regression analysis which asked (1) what proportion of the variance in 1987-88 attendance was accounted for by 1986-87 attendance and (2) what additional variance was explained by the different services reported on the MSSR. The services included whether a student was recorded as enrolled in a PCEN remediation class or a DPP enrichment class. Previous attendance was found to explain 19.6% of the variance in DPP targeted students' 1987-88 attendance. The MSSR recorded services and PCEN/enrichment then accounted for an additional 21.9% of attendance. This is a considerably larger amount of variance explained by the services than had been found in the Year Two analysis. The most likely explanation for this is that in Year Three we have the MSSR data for all ten months of 1987-88, whereas in Year Two we had the data for only three of the ten months. We must now ask, however, what it means for services to "explain" attendance.

Table 6-1 reports the b weights and beta coefficients in the regression equation predicting 1987-88 attendance from 1986-87 attendance and each of the separate services recorded on the MSSR in 1987-88. Attendance incentives, enrichment, PCEN, total physical examinations, individual guidance, group guidance, student conferences, and high school linkage, all had positive relationships to students' attendance. At the same time, mail and phone communications, home visits, and parent guidance had negative relationships to students' attendance. The services that correlate positively are those that required a students' attendance for a service to be given or recorded, while those that correlate negatively were occasioned by a student's absence. As had been the case in Year Two, we are left asking if there is any effect of the services after we have controlled for the attendance with which they were directly associated in 1987-88 itself. This question is pursued next.

TABLE 6-1

Effects of Services on Attendance
DPP Middle Schools, 1987-88

Variable	b	Standard Error	beta	F	Sig F
Prior Year Attendance	.515	.020	.320	654.252	.0000
Mail, Phone	-.003	.000	-.260	392.721	.0000
Home Visits	-.007	.001	-.166	153.321	.0000
Student Conferences	.001	.000	.042	10.945	.0009
Parent Conferences	.002	.002	.015	1.245	.2645
Individual Guidance	.003	.000	.074	24.348	.0000
Group Guidance	.003	.000	.067	19.848	.0000
Parent Guidance	-.015	.002	-.112	68.833	.0000
Attendance Incentives	.013	.001	.172	131.376	.0000
Extended Day	.000	.000	.011	.631	.4272
High School Linkage	.004	.002	.029	4.454	.0349
Health Records Check	.000	.002	.004	.098	.7547
Physical Exam, Screening	.017	.003	.077	37.159	.0000
PCEN Remediation	.041	.005	.107	66.259	.0000
DPP Enrichment	.060	.007	.117	81.117	.0000

Because the MSSR included, along with services, a record of each student's attendance each month in 1987-88, it has been possible to carry out various analyses that look for the effects of services given at one time on attendance at a subsequent time, controlling for the attendance at the first time. In every single analysis of this kind that we have conducted for the total sample of students in the 29 schools, virtually all of the variance of later attendance has been accounted for by earlier attendance and no additional variance has been explained by services. For example, we carried out an analysis that looked at the contributions of 1986-87 attendance, attendance in November through January 1987-88, and services in November through January 1987-88, to the prediction of Spring 1988 attendance. Percents of variance of the outcome variable, Spring 1988 attendance, were accounted for by the predictor variables as follows: 1986-87 attendance explained 14.1% of variance; November through January 1987-88 attendance explained an additional 35.9%; the MSSR services recorded in November through January contributed an additional 0.0%; and students' being in PCEN and/or enrichment contributed 0.0%. Similar analyses performed for other blocks of time during the 1987-88 school year have produced similar findings. What these analyses seem to be demonstrating is that services reflected students' attendance or absence in school but did not alter them.

These results might seem meaningless to anyone familiar with individual cases in which attendance outreach or counseling or an extended day experience has manifestly turned a student around, or responded to a student's needs in such a way that he or she engages more successfully in school. Many of these cases have been documented, some of them in the Pupil Personnel Records discussed in Chapter Four. What the regression analyses imply, however, is that there are larger numbers of students whom the services have not affected positively, or who have even been further alienated from the school by the services--for example, by phone, calls, letters, and home visits that may convey negative information to a child and the child's family. At the individual level of analysis, the positive and negative effects of the services seem to cancel each other out.

We have also carried out these same analyses for a subset of the individual schools one at a time. In these analyses the service data do add another 7 to 10% of variance explained. This may be partly because, as anticipated from the original qualitative and quantitative examination of the service data in Chapters Three and Four, the data are more reliable within the schools than across the schools. Beyond this, how services were delivered may help explain why some schools had greater gains and others greater losses in attendance. For one attendance gain school, group guidance in November-January 1987-88 was a positive predictor of Spring 1988 attendance after November-January

attendance was taken into account. For one attendance loss school, individual guidance in November-January 1987-88 was a negative predictor of Spring 1988 attendance after November-January attendance was taken into account. These findings suggest that quantitative analysis of this kind could be combined with qualitative observations to throw light on the effects of different services at the individual school level. For another attendance gain school, however, mail and phone services in November through January were found to be a strong negative predictor of Spring attendance after November-January attendance was entered into the equation. This baffling finding has led to our not pursuing this line of analysis further.

The analyses to this point do show that early or recent current year attendance adds significantly and subtantially to the prediction of later current year attendance after prior year attendance has been accounted for. Specifically, September 1987 attendance and 1986-87 attendance together accounted for 20.6% of the variance in Spring 1988 attendance, while 1986-87 attendance alone accounted for only 11.8% of the variance. On reflection this is no surprise, but it does point to the importance of identifying students' attendance patterns early in the year. This is important not only to identify new students for targeting, as the DPI did, but to promote the attendance of students identified for the program in the previous year.

Direct and indirect services to students with different levels of attendance in 1987-88. Table 6-2 shows that students in each successive ten percent interval of attendance in 1987-88 received more direct services, from an average of 5.0 per year for students in the 0-10% interval to an average of 27.2% for students in the 90-100% interval. This is to be expected from the simple fact that students have to be present to receive direct services. At the same time, ways might be sought to concentrate direct services more for the lower attending students on the occasions when they are present in school. Indirect services, almost exclusively attendance outreach, did seem to be concentrated on students in the low middle range of 1987-88 attendance--perhaps reflecting both the fact that these services were directed to students with lower attendance and the program's greater involvement with students closer to the middle than the lowest part of the attendance range.

Attendance of students in PCEN remediation and/or DPP enrichment classes. Chapter Four has shown that students in PCEN and/or DPP enrichment classes, i. e., students who were clustered, received substantially more services than students who were not clustered. Chapter Five has reported that students who were clustered had better attendance in 1987-88 and relatively little loss from the prior year compared to students who were not clustered. Does this mean that the services contributed to the gains for students who were clustered? This would contradict the

TABLE 6-2

Services to Students
at Different Levels of Attendance in 1987-88
DPP Middle Schools, 1987-88

Level of 1987-88 Attendance	Number of Students	Total Direct Services	Total Indirect Services
Entire population	4206	21.1	20.5
0-10%	51	5.0	21.6
11-20%	58	8.4	26.0
21-30%	72	7.1	28.3
31-40%	119	11.9	32.4
41-50%	193	14.5	33.3
51-60%	299	16.2	29.0
61-70%	524	18.8	28.4
71-80%	939	20.9	21.7
81-90%	1275	24.0	16.2
91-100%	676	27.2	9.6

findings of the regression analyses presented above. What we will now add to this picture is that students who were in PCEN and/or enrichment classes had better attendance than not-clustered students from the very beginning of the year, even though in many of the schools the PCEN and enrichment classes did not get implemented until later in the year. Table 6-3 shows the attendance of students for each month between September 1987 and June 1988 according to whether students were clustered or not in a cluster. Clustered students attended substantially more in September, October, and November, which has led us to conclude that their availability in school early in the year led to their being programmed for the clusters.

We have examined this for individual schools. For example, in School 20, the OSP site visitors wrote on January 11, 1988, "Children are being reviewed for placement in AIDP/PCEN program. Sch. Facil. stated PCEN instructional component should be in place by Jan. 13, 1988 (math remed.)." An enrichment program was not indicated on the Site Visit Report at this time, but was later recorded for students participating in the math remediation who did not qualify for PCEN. For 59 students who were eventually enrolled in PCEN, the average attendance in September had been 86.9%. For 57 students who were enrolled in enrichment, the September attendance had been 91.5%. And for 24 students who were enrolled in neither PCEN nor in enrichment, attendance in September had been 79.3%. PCEN was implemented later in School 20 than in most other schools, but the school still represents the rule rather than the exception; we have cited it because OSP's documentation is so clear in this instance.

This then clarifies why it is that PCEN and enrichment have positive beta weights in the regression analysis predicting 1987-88 attendance but yet do not add to the variance explained by attendance early in the year. Indeed, inspection of Table 6-3 shows that the attendance gap narrowed somewhat between the clustered and the not-clustered students, despite the fact that the clustered students were getting substantially more direct and indirect services, as shown in Chapter Four. The evidence is quite decisive that, overall, services in 1987-88 did not make a positive contribution to students' 1987-88 attendance.

<u>The contribution of services to courses passed after controlling for prior year courses passed</u>. A parallel set of analyses have looked at the prediction of 1987-88 percent of courses passed from 1986-87 courses passed and 1987-88 attendance and/or services. Subjects passed in 1986-87 accounted for only 7.0% of the variance in 1987-88 subjects passed. Services recorded on the MSSR accounted for another 14.5% of variance. As shown in Table 6-4, courses passed in 1987-88 was positively associated with attendance incentives, enrichment, and student conferences. Courses passed in 1987-88 was negatively associated with mail and phone, home visits, parent guidance, and parent

TABLE 6-3

1987-88 Monthly Attendance for Students by Whether They Were Clustered Together DPP Middle Schools, 1987-88

Month	--- Average Attendance --- Cluster	Not in Cluster
September, 1987	87.9%	81.7%
October, 1987	83.5%	76.9%
November,1987	81.0%	75.8%
December, 1987	78.4%	72.5%
January, 1988	75.9%	71.2%
February, 1988	78.8%	73.2%
March, 1988	78.9%	74.8%
April, 1988	76.7%	72.8%
May, 1988	74.5%	72.6%
June, 1988	83.4%	82.1%
1986-87 Average Attendance	77.2%	70.6%

TABLE 6-4

Effects of Services on Courses Passed
DPP Middle Schools, 1987-88

Variable	b	Standard Error	beta	F	Sig F
Prior Year Courses Passed	.218	.016	.206	185.706	.0000
Mail, Phone	-.005	3.71E-04	-.202	162.015	.0000
Home Visits	-.013	.001	-.161	97.116	.0000
Student Conferences	.001	5.90E-04	.033	4.437	.0352
Parent Conferences	-.013	.005	-.041	6.513	.0107
Individual Guidance	.001	.001	.019	1.161	.2813
Group Guidance	-9.44E-04	.002	-.011	.368	.5440
Parent Guidance	-.018	.004	-.076	21.148	.0000
Attendance Incentives	.019	.002	.147	65.838	.0000
Extended Day	-1.91E-04	4.02E-04	-.008	.228	.6333
High School Linkage	.006	.004	.029	3.005	.0831
Health Records Check	-5.32E-04	.005	-.002	.012	.9139
Physical Exam, Screening	-.001	.006	-.004	.053	.8172
PCEN Remediation	.010	.011	.014	.780	.3771
DPP Enrichment	.104	.014	.122	56.667	.0000

conferences. Again, however, the services appear to correlate most directly with attendance and thus to reflect attendance rather than to contribute directly to courses passed.

A further regression analysis first entered prior year subjects passed, which accounted for 7.4% of variance in 1987-88 subjects passed (with a smaller n due to more data being required for each student). Attendance in September and October 1988 was entered next and explained an additional 9.2% of variance. In a third step, all services recorded on the MSSR in November through January 1987-88 were entered and accounted for 3.2% more variance. Direct services, however, were not significantly related to courses passed. Only indirect services were related significantly to courses passed and the correlations were negative. As indirect services included mostly attendance outreach, this finding reflects simply the prediction that students who were absent in November through January would have a lower percent of courses passed at the end of the year. Finally, PCEN and enrichment were entered and accounted for only 1.2% more of variance. There is, then, no evidence that services as recorded on the MSSR contributed significantly to variance in courses passed in 1987-8.

Attendance in September 1987, just the first month of the year, correlated much more strongly (r=.56) with percent of courses passed in 1987-88 than did courses passed in the previous year (r=.27). As with 1987-88 attendance, then, so for courses passed in 1987-88, attendance during the early part of the year was decisive for performance later in the year. To put it another way, high and low performing students in 1987-88 were much more different from each other in September 1987 than they had been in 1986-87. The patterns suggest that factors in the students' personal or home situations over the summer, or in their initial school-year experiences, intervened, so that students became differentiated as good attenders vs. poor attenders quite early in the school year. This again suggests that September attendance should be monitored closely and responded to immediately. In fact, a preventive approach would include a positive outreach and welcome to school quite different from what many students might ordinarily experience.

Middle Schools with Relatively High or Low Attendance and Courses Passed in 1986-87

As we did in Year Two, we have looked at the schools that had relatively positive or negative attendance changes and changes in courses passed between the prior year and the program year. For this purpose we have selected the schools on the basis of the beta weights produced by regression analyses that first entered the students' prior year attendance or courses passed, as relevant. This then takes into account the changes that would be

expected on statistical grounds alone, particularly regression toward the mean, and asks what further difference it made to students to be in one school vs. another. Attendance in 1986-87 accounted for 19.6% of the variance of targeted students' 1987-88 attendance and schools then explained an additional 2.1% of variance. Courses passed in 1986-87 explained 7.7% of variance in 1987-88 courses passed and schools accounted for an additional 4.4% of variance. These percentages of outcomes explained by schools were slightly lower than they had been in Year Two, when schools explained an additional 2.8% of variance in attendance and 5.9% of variance in courses passed.

Tables 5-24 and 5-25 reported the raw change scores and the regression coefficients for individual schools for attendance and courses passed respectively. As the beta weight for a given school was found to be higher in a positive direction, students in that school were more likely to have had higher gains in the outcome variable in question, attendance or courses passed.

The schools that were identified by this procedure were not necessarily those that showed the largest unadjusted gain or loss in attendance (or raw change score). In fact, School 26 had a negative unadjusted change of -0.26% in attendance between 1986-87 and 1987-88, but had a more positive beta weight than School 19, for which the unadjusted change was +2.31. This reflects the fact that the students in School 26 would have been expected to have had an even greater loss than they realized, from the standpoint of the regression toward the mean. School 32 had a change of +6.08% in courses passed between 1986-87 and 1987-88, but had the second most negative beta weight of all the schools, in this case because the students would have been expected to have a substantially larger gain in courses passed on the basis of regression to the mean. However, there is much debate among evaluators today about how to take account of regression toward the mean without underestimating a program effect. School 32 may be unduly penalized by the regression technique. This school had a large concentration of students with a low rate of passing courses the previous year (50.4% average passing rate in 1986-87, the lowest of all the 29 schools); there may well have been a lesser probability that all of these students would have gained in 1987-88 in the same way that more isolated cases might have regressed from this level to the mean in other schools. We report our findings in the interest of spurring further inquiry into the processes that affect students' attendance and courses passed and not with an intention to label the schools.

Table 6-5 lists the six schools with the highest beta weights and the seven with the lowest beta weights for attendance. Schools 16, 29, 17, 25, 21, and 19 had the most positive effect on attendance, and Schools 14, 40, 42, 15, 27, 32, and 37 had the least positive effect on attendance, relative to all 29 schools in the program and after taking account of

TABLE 6-5

Year Three, Two, and One
Beta Coefficient Rankings of Schools
with the Greatest Attendance Gains
or Losses in 1987-88
DPP Middle Schools, 1987-88

School	Unadjusted Attendance Change 1986-87 to 1987-88	Year Three Beta Rank	Year Two Beta Rank	Year One Beta Rank
26	-0.26	1	25	25
29	0.97	2	5	17
17	2.96	3	1	3.5
25	-0.14	4	20	5
21	-0.90	5	9	16
19	2.31	6	2	7
37	-5.53	23	23	15
32	-5.86	24	18	19
27	-6.73	25	10	12
15	-7.80	26	19	13
42	-7.67	27	26	14
40	-6.78	28	11	21
14	-9.04	29	17	29

previous attendance. We will call the first schools attendance "gain" schools and the second attendance "loss" schools. The difference between the b weights for Schools 19 and 37, which respectively had the least gain of the gain schools and the least loss of the loss schools, is significant at the .05 level. Since these are the two schools closest to each other in the beta ranking in Table 6-5, the differences between any of the gain schools and any of the loss schools would be significant at the .05 level or better.

Given our finding that September attendance was a strong predictor of later attendance and courses passed, we have asked which schools had the largest effect on Spring 1988 attendance after September 1987 attendance was controlled for. The same schools emerged as having the strongest positive effect, but in a different order from the one reported in Table 6-5. Schools 19, 21, and 29 had the strongest positive influence on attendance after September.

Table 6-6 lists seven schools with the most positive beta weights for change in courses passed, Schools 29, 21, 38, 16, 36, 35, and 26. The schools with the least positive beta weights for change in courses passed were Schools 37, 32, 14, 22, 30, 31, and 18. The difference between the b weights for Schools 26 and 18, which are closest together in this ranking, is significant at the .05 level.

In the Year Two Report, we identified only four gain and four loss schools for attendance and courses passed respectively. We have identified more this time, approximately the top quarter and the bottom quarter of the schools in each ranking, in order to inspect the statistical histories of gain and loss schools. Table 6-5 shows not only the ranking of the attendance beta weights for the schools in Year Three, but the ranking for these same schools in Years Two and One. Similarly, Table 6-6 shows the beta rankings for courses passed for all three years.

School 26, which emerged with the strongest attendance beta weight in Year I, had had one of the weakest of the beta weights in both Years II and III, ranking 25 in both years. School 25 had ranked 20th in Year II, although it had ranked 5th in Year I, similarly to its ranking 4th in Year III. Similar changes, from low to high or high to low ranking, can be found for schools in each of the four sets of schools represented in Tables 6-5 and 6-6. The rankings of the schools, then, are quite volatile. Half of the schools that were identified as exceptional gain schools in attendance or courses passed in Year Two did not maintain this position in Year Three. Likewise, half of those identified as exceptional loss schools in Year Two did not show up as loss schools in Year Three. This causes us to be cautious about the characteristics of "exceptional" schools. We will focus here on a few schools for which there seem to be especially

TABLE 6-6

Year Three, Two, and One
Beta Coefficient Rankings of Schools
with the Greatest Gains or Losses
in Courses Passed in 1987-88
DPP Middle Schools, 1987-88

School	Unadjusted Change in Courses Passed 1986-87 to 1987-88	Year Three Beta Rank	Year Two Beta Rank	Year One Beta Rank
29	27.60	1	1	19
21	11.17	2	9	28
38	5.70	3	8	13
16	17.04	4	15	18
36	5.38	5	6	6
35	-1.09	6	18	2
26	-3.14	7	4	22
18	2.92	23	27	21
31	-10.90	24	6	16
30	-4.17	25	20	17
22	-8.63	26	15	4
14	-10.77	27	3	9
32	6.08	28	25	20
37	-6.55	29	28	8

meaningful patterns in the statistical data and which our observations in the schools shed some light on.

School 17 ranked third for attendance in Year Three, first in Year Two, and tied for third in Year One. In both Year Three and Year Two, School 17 had the largest unadjusted attendance gain of all of the schools. Can we account for this consistent record of attendance gain? One thing that distinguished the school in the first two years was an attendance incentives program that students said motivated them to come to school. The facilitator organized many day and weekend trips for students. In the second year, when students were first being asked if they wanted to "join" the attendance improvement program, the facilitator was able to show students pictures taken on trips in the first year, as well as to describe other prizes for attendance. The facilitator's personal investment in these activities, which extended to carrying out trips collaboratively with other DPP schools, seemed to have been a factor in the program's appeal to students. Another factor was an attendance outreach staff that appeared to have excellent communications with students. However, a new facilitator took over in Year Three; relationships between the new facilitator and other faculty were better in Year Three than these relationships had been in Years One and Two; a key family worker left the staff; a new (SAPIS) guidance person joined the staff; the emphasis on trips was diminished; and now <u>all</u> targeted students were programmed for PCEN mathematics, which gave the attendance outreach staff equal access to all targeted students. In other words, there were major changes in the program while the school maintained its targeted students' attendance gains. The details of the program, then, do not alone account for the consistency in its attendance performance. The program seemed to be doing different things well in different years. Indeed, the average gain on the Mathematics Achievement Test (MAT) for targeted students in School 17, 1.91, was twice the average gain of the DPP population as a whole, 0.97, and substantially larger than the gain for any other single school. Finally, the attendance gains in School 17 were not accompanied by commensurate gains in courses passed in Year Two, while in Year Three data on courses passed were missing for many students.

The only other school in which all targeted students were clustered in one or more classes in Year Three was School 29, which ranked 2nd in adjusted attendance gain that year. School 29 not only ranked 2nd in attendance, it ranked 1st in courses passed gain in Year Three and had ranked first in courses passed gain in Year Two as well. This school was written up in detail in the Year Two Report. In the first two years it had career enterprise activities--a chocolate factory, a greenhouse, and a school supplies store--that provided opportunities for students to learn business skills and that furnished a medium for positive interactions with students. These activities were not funded in

Year Three and staff of the program felt that this was a real loss. However, a career education emphasis was maintained through enrichment courses, which enrolled about 80% of the targeted students in Year Three and which stressed career awareness. It was in this connection that the program sponsored a Law Career workshop. Legal personnel ranging from a judge to a court stenographer and representing several area law schools volunteered to participate and the workshop was attended by many parents along with their children. Other special events sponsored by the program that involved large numbers of parents with their children included an asthma clinic, an AIDS clinic, a raffle and a Thanksgiving dinner. The family workers were reported to have excellent relationships to the children and families. More uniquely, the DPP staff, including the family workers and a guidance counselor, ate lunch everyday with the children's teachers, i. e., the teachers brought their lunch into the DPP office. The targeted students were block programmed for all of their courses in Years Two and Three and their major subject teachers all had classrooms in the vicinity of the project office. This obviously facilitated communication, not only informally, but also for specific attendance monitoring procedures. When students came in late to school, they went first to the DPP office to sign in on the door; a family worker went to each of the classes in the later part of the morning and in the afternoon, to see if any students listed as absent early in the day had since come into school; doctors' notes were pursued; and all of these means were used to correct the official attendance that was finally reported for students. In an interview with evaluation staff, the School 29 facilitator cited "management" as a key reason for obtaining attendance gains.

Reading levels were used to group the targeted students, and the teachers adapted the prescribed curriculum to the interests and ability levels of the students. Block programming, like tracking, does run the risk of lowering expectations and creating negative images for students. However, in School 29, prestige seemed to be attached to being in the program. Another factor to consider is that the percentage of students in the entire school scoring on grade level on the Degrees of Reading Power (DRP) Test was the lowest of all the middle schools in the city in Spring, 1988, while the average gain for School 29 students in the program between 1987 and 1988 was about average for DPP students as a whole. Is the DPP program an island of accomplishment in a school that otherwise has low achievement? One finding that might contradict this is that the average gain on the MAT for School 29 targeted students was 0.54, the second lowest gain for targeted students in any DPP school and not much more than half the gain for DPP students as a whole, +0.97; the PCFN remediation program at School 29, however, was not in math but in reading. The answer to our question is not a simple no or yes.

We shall make some much briefer comments about other

schools. School 21 is a school that has steadily improved its beta ranking for both attendance and courses passed between Year One and Year Three. In attendance, it has moved from rank 16 to 9 and now to 5, while in courses passed it has moved from rank 28 to 9 and now to 2. Attendance for the school as a whole was 90% in 1987-88, the highest for all 29 schools and a 1% gain over the previous year for the school--so the general school context for attendance was favorable. This was not a school in which Teachers College observed in Year Three, 1987-88. However, well before outcome data became available, we noticed a quality of problem solving in the records of the Pupil Personnel Committee from this school. A meeting in January reviewed the extended day programs, including a before-school homework helper program. One infers that extended day attendance was initially low, since the minutes concentrated on possible incentives to attract and hold students for the programs: rewards for attendance, snacks, etc. Later meetings reviewed the attendance, which fluctuated, and recommended further measures to hold students in the homework helper program. This represented an unusual degree of follow through in the PPC minutes that we read.

The minutes from School 21 summarized discussions of many other matters, as did minutes from other schools: budget, the incentive system, a business enterprise program, trips, student cases, and so on. The minutes were typed and appended to the blank Decision Sheet form schools were supposed to fill out for OSP, and a record of OSP's site visit to the school in December indicated "TA [technical assistance] to reclarify to the facilitator the correct usage of PPC (OSP) decision sheets as per OSP guidelines and prior school-staff district training of 9/87." Seven tax-levy school personnel--an assistant principal, the attendance coordinator, a guidance counselor, the health resources coordinator, a reading teacher, a 6th grade teacher, and a drama teacher--were identified as PPC members in addition to the facilitator and OSP indicated at this time that PPC members should be "rotated on an as needed basis--as per OSP guidelines and prior district-school-staff training 9/87." The site visitor further made various recommendations to improve the recording of services, some services having been found underdocumented and others overdocumented for the MSSR. Superficially, the OSP report suggests that record keeping and conformity to guidelines were more important than program substance and tax-levy staff participation in the program. However, the actions recorded in the PPC minutes did represent the kinds of activities that OSP was promoting, so perhaps School 21 is an example of a school that has responded positively to OSP's facilitation.

School 26 made a much more sudden shift in its attendance beta rank, as noted before, from 25th position in both Year One and Year Two to first position in Year Three. For courses passed, it ranked 22nd in Year I, 4th in Year Two, and 7th in

Year Three. What is most salient in the material from this school is an improvement in the relationship between the CBO and school staff, especially in the last year. Both a change of personnel and the development of the Pupil Personnel Committee seem to have contributed to increased communications. The OSP monitor made various recommendations to improve communications between CBO and school staff, for example for the scheduling of meetings. It may be that this increased coordination has contributed to communications with students themselves and that this in turn has promoted students' attendance.

Three of the four schools discussed so far ranked in the top quarter of the schools in the beta weights for both attendance and courses passed in 1987-88. Another three schools ranked in the bottom quarter for both attendance and courses passed. Each of these schools was observed to have some feature that would be expected to promote improvement in students' performance: a thorough attendance outreach program in one case, a systematic program of group counseling in another, and a facilitating school administration in the third. We feel less confident to speculate about why a particular school is not succeeding than about why other schools are more successful. Given the data about how students in their schools are faring, and assistance in reading the data, the staffs of the high-loss schools would themselves probably be the best positioned to determine why students are doing worse in their schools than the students' own prior records would have predicted.

Chapter Seven

MIDDLE SCHOOL PROGRAM EXPENDITURES FOR 1987-88

Introduction

This chapter reports on program expenditures for the Dropout Prevention Program during 1987-88.[1] The primary questions we address are: a) how much did the Dropout Prevention Program cost; b) was there any relation between program expenditures and service delivery; and c) was there any relation between program expenditures and outcomes?

Data for this analysis were supplied by the Board of Education's Office of Student Progress, Office of Funded Programs, and Office of Budget Operations and Review. The Board maintains centralized financial records by community school district, not by middle school. Accordingly, while the figures on district expenditures were supplied to us by the Board of Education, school-level figures had to be estimated. Our method of estimation was to allocate district costs to the separate schools in proportion to their relative levels of staffing, as reported in monitoring documents from the Office of Student Progress. This method probably does not account accurately for school-level differences in OTPS (Other-than-Personnel-Services) expenditures, but since OTPS costs represent just over ten percent of total expenditures, we felt the margin of error was acceptable.

This year's analysis differs from earlier analyses in one important way. Fringe benefit costs for Board of Education personnel assigned to the Dropout Prevention Program are paid from a separate budget line, not from the Dropout Prevention Program budget. Hence, they were not included in previous analyses of charges against the special city- and state-funded DPP budget line. However, they are important costs of the program, and a fair comparison of school and CBO program costs should reflect fringe benefit costs incurred by both sources, regardless of which budget line actually covers the costs. In this chapter we therefore report fringe benefit costs incurred for Board of Education employees who were hired on the Dropout

---

1. In the Year One and Year Two reports, program allocations and budgets were presented as well, and it was found both years that middle school programs tended to underspend their budgets. Some of the underspending appeared due to unfilled personnel positions and problems caused by late budget approvals. However, the discrepancies between budgets and expenditures were also caused by late reporting of budget entries or changes and nonstandardized methods for estimating personnel costs, and did not solely reflect an inability of schools to spend budgeted funds. For this reason, we did not continue the analysis of allocations and budgets in Year Three.

for Board of Education employees who were hired on the Dropout Prevention Program budget.

Program Costs

In 1987-88, expenditures charged against the middle school Dropout Prevention Program budget line totaled $4,142,189. This represents an 8.4 percent increase (or $321,617) over the total of $3,820,572 for 1986-87. Fringe benefit costs for 1987-88 totaled $550,612, bringing the expenditure total for Year Three to $4,692,801.

Table 7-1 shows the breakdown of total costs into four budget categories. Expenditures for Board of Education personnel salaries and per session pay (for work beyond the regular school day) totaled $2,171,638, or 46% of the total program costs. Fringe benefit expenditures of $550,612 were an additional 11.7% of total costs. Expenditures for the various OTPS categories, including supplies, transportation, food, and the like, totaled $488,932 -- 10.4% of total costs. Finally, contracts to community-based organizations (CBOs) totaled $1,481,619, or 31.6% of total costs.

Table 7-2 shows program costs for each of the ten community school districts, broken into school costs (which also cover district-level personnel assigned to the program) and CBO costs. District costs ranged from $544,316 in District 3 to $333,420 in District 17. As was the case in Years One and Two, average district expenditures in the CBO-with-School model were greater than the average in the School-Alone (SA) model. Districts in the CBO model had average expenditures of $508,126, compared to average expenditures of $443,383 for districts in the School-Alone model.

Schools in the CBO model typically enrolled fewer students in their dropout prevention programs than did schools in the School-Alone model. This, along with the different average expenditures noted above, resulted in a large gap between the two models in average per-pupil expenditures. The average per-pupil expenditure in the School-Alone model was $798. The average per-pupil expenditure in the CBO model was $1432, nearly 80% higher than in the School-Alone model. Per-pupil expenditures for the ten community school districts are shown in Table 7-3.

The fact that some districts had lower total costs or lower per-pupil costs than other districts does not necessarily imply more efficient use of funds. Rather, lower costs may have resulted from the inability to maintain full program staffing for the entire school year, or from problems in spending OTPS funds due to late budget approvals. In effect, then, students in the low-cost districts may have had the benefit of a less than complete program, not simply a more efficient program.

Table 7-4 shows total expenditures, costs per budget

TABLE 7-1

Program Expenditures, by Budget Category
DPP Middle Schools, 1987-88

Category	Amount	Proportion of Total
Board of Education:		
Personnel	$2,171,638	46.3%
Fringe Benefits	550,612	11.7%
TPS	488,932	10.4%
Subtotal	$3,211,182	68.4%
CBO Contracts	$1,481,619	31.6%
Total	$4,692,801	100.0%

TABLE 7-2

Total School and CBO Program Costs, by District
DPP Middle Schools, 1987-88

District	School Expenditures	CBO Expenditures	Total Expenditures	Rank	Rank Excluding Fringe Benefits	(Rank in 1986-87)^
School-Alone Model	$2,660,298	--	$2,660,298			
District 7	$473,498	--	$473,498	5	6	(8)
District 9	$504,261	--	$504,261	3	5	(9)
District 10	$447,586	--	$447,586	9	7	(4)
District 14	$448,082	--	$448,082	8	9	(10)
District 17	$333,420	--	$333,420	10	10	(7)
District 32	$453,451	--	$453,451	7	8	(5)
CBO/School Model	$550,884	$1,481,619	$2,032,503			
District 3	$167,645	$376,671	$544,316	1	1	(2)
District 15	$142,442	$374,850	$517,292	2	2	(1)
District 19	$136,731	$362,598	$499,329	4	3	(3)
District 27	$104,066	$367,500	$471,566	6	4	(6)
TOTAL	$3,211,182	$1,481,619	$4,692,801			

Average Expenditures per District:

School-Alone Model: $443,383
CBO/School Model: $508,126

^ Since the analyses of 1986-87 program costs did not include fringe benefits, this ranking should be compared to the 1987-88 ranking excluding fringe benefits.

TABLE 7-3

Total Program Expenditures and Average Per-Pupil Expenditures, by District
DPP Middle Schools, 1987-88

District	Total Expenditures	Students in DPP	Average Per-Pupil Expenditure	Rank
School-Alone Model	$2,660,298	3333	$798	
District 7	$473,498	567	$835	9
District 9	$504,261	562	$897	5
District 10	$447,586	507	$883	6
District 14	$448,082	516	$868	7
District 17	$333,420	642	$519	10
District 32	$453,451	539	$841	8
CBO/School Model	$2,032,503	1419	$1,432	
District 3	$544,316	332	$1,640	1
District 15	$517,292	358	$1,445	2
District 19	$499,329	359	$1,391	3
District 27	$471,566	370	$1,275	4
Total	$4,692,801	4752	$988	

category, and per-pupil expenditures for each of the middle schools during Year Three. Total school costs ranged from $105,896 in School 24 to $297,033 in School 26. Although School 26 had the highest total costs, its program roster of 241 students was considerably larger than that in most other schools. School 42 had the highest per-pupil cost, $1743 per student, although it ranked sixth in total expenditures. The lowest cost per pupil was in School 36 ($452 per student), which was twenty-seventh in total expenditures.

Relationship Between Program Costs and Services

Funding levels generally have no direct effect on outcomes, only an indirect one by affecting a program's ability to purchase and deliver services. Was there a relation between the level of funding for the different schools and the amount of program services they gave to students?

In the Dropout Prevention Program, there were two ways in which expenditures might have been related to the provision of services. First and most generally, if funds were not expended for personnel positions, service delivery could be reduced. Although other staff might compensate for service reduction caused by staff vacancies, this was not always the case. As an example, schools could record having provided individual and group guidance for students only when such services were provided by a certified guidance counselor or similar professional. When schools did not hire such staff members (and thus did not spend the budget allotment) for the full year, the level of these services was reduced. Second, the amount of non-personnel related program benefits received by students was directly related to expenditures for such items. For example, if budget delays caused funds for incentive trips and awards to be unavailable, students received fewer trips and awards.

Table 7-5 shows schools' total per-pupil expenditures in rank order, along with the total number of direct and indirect services per student reported for each school on MSSR forms. It is apparent from Table 7-5 that there was no simple relationship between funding level and recorded services. For example, the school ranked highest in per-pupil expenditures, School 42, ranked only tenth in average total indirect services per student and seventh in average total direct services. (It should be recalled that some schools may have underreported services.)

However, using regression analysis, program expenditures were found to explain a substantial proportion of the variance in per-pupil services delivered. In order to conduct a regression analysis, we first combined indirect and direct services into a single figure. Since the different services (phone calls, home visits, student guidance sessions, extended day sessions, etc.) required different time and skills, we used the following formula: all direct services and home visits were weighted equally at a value of 1.0, and all indirect services (excluding

TABLE 7-4

Total Program Expenditures, by Budget Category
and Per-Pupil Expenditures
DPP Middle Schools, 1987-88

School	Personnel	OTPS^	Fringe Benefits$	CBO Contract	Total Expenditures	Rank	Students in DPP	Average Per-Pupil Expenditure	Rank
School-Alone Model	$1,831,472	$377,260	$451,566	--	$2,660,298		3333	$798	
14	$120,144	$16,243	$25,235	--	$161,622	18	215	$752	23
15	$124,105	$16,778	$26,067	--	$166,950	12	196	$852	18
17	$119,829	$18,927	$24,002	--	$162,758	17	140	$1,163	13
18	$78,537	$16,949	$19,928	--	$115,414	25	186	$621	25
20	$69,656	$21,111	$18,687	--	$109,454	26	188	$582	27
21	$121,611	$37,287	$35,892	--	$194,790	5	167	$1,166	12
24	$74,494	$11,643	$19,759	--	$105,896	29	173	$612	26
25	$138,346	$21,621	$36,694	--	$196,661	3	181	$1,087	15
28	$85,163	$26,101	$25,125	--	$136,389	23	174	$784	21
29	$94,533	$28,650	$25,361	--	$148,544	19	177	$839	19
31	$74,173	$16,008	$18,822	--	$109,003	27	215	$507	28
33	$107,847	$17,035	$21,602	--	$146,484	20	186	$788	20
34	$107,733	$14,565	$22,628	--	$144,926	21	156	$929	17
35	$101,854	$16,088	$20,402	--	$138,344	22	181	$764	22
36	$74,173	$16,008	$18,822	--	$109,003	27	241	$452	29
38	$124,385	$37,698	$33,370	--	$195,453	4	174	$1,123	14
39	$72,996	$22,372	$21,535	--	$116,903	24	175	$668	24
41	$141,893	$22,176	$37,635	--	$201,704	2	208	$970	16
CBO/School Model	$340,166	$111,672	$99,046	$1,481,619	$2,032,503		1419	$1,432	
16	$27,332	$3,896	$7,459	$125,557	$164,244	16	104	$1,579	3
19	$20,292	$18,336	$6,949	$120,866	$166,443	13	108	$1,541	4
22	$33,806	$8,058	$7,990	$124,950	$174,804	8	128	$1,366	8
23	$32,130	$8,378	$11,525	$122,500	$174,533	10	129	$1,353	9
26	$32,130	$8,378	$11,525	$245,000	$297,033	1	241	$1,233	10
27	$28,978	$6,908	$6,848	$124,950	$167,684	11	110	$1,524	6
30	$20,292	$18,336	$6,949	$120,866	$166,443	13	109	$1,527	5
32	$45,554	$6,494	$12,431	$125,557	$190,036	6	119	$1,597	2
37	$20,292	$18,336	$6,949	$120,866	$166,443	13	142	$1,172	11
40	$33,806	$8,058	$7,990	$124,950	$174,804	8	120	$1,457	7
42	$45,554	$6,494	$12,431	$125,557	$190,036	6	109	$1,743	1
TOTAL	$2,171,638	$488,932	$550,612	$1,481,619	$4,692,801		4752	$988	

^ OTPS=Other Than Personnel Services (travel, supplies, etc.)
$ Fringe benefit costs were not included as program costs in Year 1 (1985-86) or Year 2 (1986-87)

TABLE 7-5

Rank Ordering of Schools by Per-Pupil Expenditures, Average Number of Indirect Services Per Student, and Average Number of Direct Services Per Student DPP Middle Schools, 1987-88

School	(N)	Average Per-Pupil Expenditures	Rank	Average Number of Indirect Services*	Rank	Average Number of Direct Services**	Rank
OVERALL	4752	$988		20.08		20.70	
42^	109	$1,743	1	23.20	10	28.13	7
32^	119	$1,597	2	19.12	18	33.36	4
16^	104	$1,579	3	15.72	20	41.82	3
19^	108	$1,541	4	22.75	11	17.66	16
30^	109	$1,527	5	19.85	17	29.80	6
27^	110	$1,524	6	33.73	2	32.57	5
40^	120	$1,457	7	20.69	16	48.74	2
22^	128	$1,366	8	22.55	13	23.60	12
23^	129	$1,353	9	24.92	7	13.48	23
26^	241	$1,233	10	12.16	25	13.73	22
37^	142	$1,172	11	15.41	22	20.23	14
21	167	$1,166	12	40.80	1	14.57	20
17	140	$1,163	13	27.39	4	18.21	15
38	174	$1,123	14	11.11	26	9.45	27
25	181	$1,087	15	26.30	5	51.99	1
41	208	$970	16	10.06	27	27.49	8
34	156	$929	17	18.25	19	25.12	11
15	196	$852	18	15.06	23	21.52	13
29	177	$839	19	14.41	24	4.31	29
33	186	$788	20	26.23	6	27.24	10
28	174	$784	21	24.51	8	15.14	19
35	181	$764	22	21.56	14	15.96	18
14	215	$752	23	7.66	29	27.44	9
39	175	$668	24	15.58	21	10.21	26
18	186	$621	25	22.74	12	13.97	21
24	173	$612	26	9.55	28	8.59	28
20	188	$582	27	21.49	15	16.32	17
31	215	$507	28	23.95	9	11.36	25
36	241	$452	29	27.59	3	12.14	24

* Average Indirect Services is the average total of indirect services per student during the 1987-88 school year. Indirect services include: mail contact, phone calls, auto dialer, home visits, and health record review.

** Average Direct Services is the average total of direct services per student during the 1987-88 school year. Direct services include: parent conference, student conference, individual guidance, group guidance, parent guidance, attendance incentives, extended day program, high school linkage, physical exam vision screening, and hearing screening.

^ A school in the CBO/School model.

home visits) were given a weight of 0.33. Services were then summed to arrive at an adjusted total average number of services per student. Table 7-6 shows this figure for each school.

A regression analysis was then performed which used adjusted total services per student as the dependent variable, and total per-pupil expenditures as the independent variable. Per-pupil expenditures were found to explain 29.5% of the variance in adjusted total services. The coefficient for per-pupil expenditures was .0175, indicating that additional per-pupil expenditures of $100 would be associated with 1.75 additional services per student (regression results are shown in Table 7-7). When program model (School-Alone vs. CBO/School) was added to the regression equation as an independent variable, there was no significant increase in total variance explained, in part because model was highly correlated with per-pupil costs (r=.882). However, the coefficient for program model was negative,[2] suggesting that after controlling on the level of per-pupil expenditures, schools in the CBO model delivered fewer total services per student than did schools in the School-Alone model.

As was discussed in Chapter Four, the average *per-pupil* number of services differed between the program models largely because the target populations differed. In both indirect and direct services, the average *total* number of services per school was higher in the School-Alone model.[3] However, when per-pupil services are considered, the average number of direct services per student is much higher in the CBO model, because there are many fewer students to divide the services among. With this in mind, we did a regression analysis to determine if total school costs were related to total number of services (using the same computation formula to arrive at a single adjusted figure for total services). In this analysis, total costs were not significantly related to total services, both when they were the sole predictor of total services and when program model was entered as a second predictor. Again, although the coefficient for program model was not statistically significant, it was negative, suggesting that, at a given level of program costs, a School-Alone school would deliver more total services than would a CBO model school.

Two cautions must be stated at this point. First, regression analysis should not be used to project the relationship between costs and services beyond the range

---

2. Program model was represented in the equation by a dummy variable, with School-Alone model equal to 1 and CBO/School model equal to 0.

3. Schools in the School-Alone model delivered an average total of 3722 indirect services, compared to 2593 for schools in the CBO model. Schools in the School-Alone model delivered an average total of 3407 direct services, compared to 3354 for schools in the CBO model.

TABLE 7-6

School Rankings in Average Per-Pupil Expenditures and Adjusted Average Total Program Services per Student DPP Middle Schools, 1987-88

School	Average Per-Pupil Expenditures	Rank	Adjusted Average Total Services Per Pupil*	Rank
42^	$1,743	1	40.70	6
32^	$1,597	2	46.21	4
16^	$1,579	3	50.48	3
19^	$1,541	4	28.34	17
30^	$1,527	5	38.75	7
27^	$1,524	6	44.71	5
40^	$1,457	7	56.43	2
22^	$1,366	8	31.84	11
23^	$1,353	9	24.10	22
26^	$1,233	10	18.98	25
37^	$1,172	11	27.71	18
21	$1,166	12	29.95	14
17	$1,163	13	30.68	13
38	$1,123	14	17.76	27
25	$1,087	15	63.65	1
41	$970	16	33.90	9
34	$929	17	33.52	10
15	$852	18	28.63	16
29	$839	19	12.48	29
33	$788	20	38.72	8
28	$784	21	24.62	21
35	$764	22	25.03	20
14	$752	23	31.59	12
39	$668	24	18.38	26
18	$621	25	25.28	19
24	$612	26	13.87	28
20	$582	27	29.12	15
31	$507	28	22.26	24
36	$452	29	23.51	23

---

* Total adjusted services were computed by assigning all direct services and home visits a weight of 1.0, and assigning all indirect services a weight of 0.33.

^ A school in the CBO/School model.

TABLE 7-7

Results of Regression Analyses for the Cost-Effectiveness Analysis

A. Predict per-pupil adjusted services* from per-pupil costs^

R-square = .2945 ($p<.01$)

Constant = 12.83
b (Per-Pupil Costs) = .0175

B. Predict per-pupil adjusted services* from per-pupil costs and program model

R-square (costs entered first) = .2945 ($p<.01$)
R-square change (when model entered) = .0281 (n.s.)

Constant = 6.63
b (Per-Pupil Costs) = .0262
b (Model) = -7.8015

C. Predict total adjusted services* from total costs

R-square = .0356 (n.s.)

Constant = 3513.46
b (Total Costs) = .00874

D. Predict total adjusted services* from total costs and program model

R-square = .0356 (n.s.)
R-square change = .0870 (n.s.)

Constant = 2813.82
b (Total Costs) = .01594
b (Model) = -1227.69

---

* A single figure for adjusted services was computed by assigning a weighted value of 1.0 to each direct service and to home visits, and a value of 0.33 to each indirect service (except for home visits)

^ Costs are entered into the equation in units of $1.00.

represented by the data available. Per-pupil costs during 1987-88 ranged from $450 to $1700; the analysis can therefore not predict how many services would be provided if per-pupil funding were increased to $3000 or more, or if funding were reduced to a zero level.

Second, this regression analysis suggests that, in terms of service delivery, the School-Alone model is more efficient than the CBO model, although the results are not statistically significant. These results should lead to serious consideration of the optimal funding level and target population size for community-based organizations. However, it should be kept in mind that CBOs may produce other benefits and effects which are not reflected in this analysis.

At any rate, as was discussed in Chapter Six, there were no systematic relationships between the level of direct or indirect services and student outcomes. Therefore, the finding of a relationship between costs and services does not necessarily indicate that costs will influence outcomes. We therefore turn to an examination of the relationship between expenditures and outcomes.

Relationship Between Program Expenditures and Outcomes

Table 7-8 shows total and per-pupil expenditures, in rank order, along with the rank ordering of attendance outcomes and courses passed outcomes for each school. (Outcome rankings are based on regression predictions of attendance and courses passed after prior year values are taken into account.) As with services, there appears to be no simple linear relationship between expenditures and outcomes. The school which ranked first in per-pupil expenditure level (School 23) ranked ninth in attendance change and twenty-fourth in courses passed change. Conversely, the school which ranked last in per-pupil expenditures (School 36) ranked nineteenth in attendance and twelfth in courses passed. A similar pattern emerges when the rank ordering of total expenditures is considered.

Regression analyses confirmed the lack of a consistent relationship between dollars spent and program outcomes. Several analyses were carried out, using either total costs or per-pupil costs as the independent variable, with the dependent variable either schools' average raw change scores (in attendance or courses passed) or the beta coefficients for school effects on outcomes after controlling for prior performance. In each case, expenditures did not have an effect on outcomes at the school level. Two additional analyses used raw change scores as the dependent variable, and entered program services and costs as independent variables. These equations also failed to reach statistical significance for variance explained.

TABLE 7-8

School Rankings for Total Expenditures, Per-Pupil Expenditures, Attendance Outcomes, and Courses Passed Outcomes
DPP Middle Schools, 1987-88

School	Total Expenditures	Rank	Average Per-Pupil Expenditures	Rank	Rank for Attendance Change*	Rank for Change in Courses Passed
School-Alone Model	$2,660,298		$798			
14	$161,622	18	$752	23	29	28
15	$166,950	12	$852	18	28	7
17	$162,758	17	$1,163	13	1	6
18	$115,414	25	$621	25	22	14
20	$109,454	26	$582	27	14	21
21	$194,790	5	$1,166	12	7	4
24	$105,896	29	$612	26	10	13
25	$196,661	3	$1,087	15	4	5
28	$136,389	23	$784	21	8	26
29	$148,544	19	$839	19	3	1
31	$109,003	27	$507	28	17	29
33	$146,484	20	$788	20	15	15
34	$144,926	21	$929	17	11	10
35	$138,344	22	$764	22	18	16
36	$109,003	27	$452	29	19	12
38	$195,453	4	$1,123	14	13	11
39	$116,903	24	$668	24	23	18
41	$201,704	2	$970	16	12	8
CBO/School Model	$2,032,503		$1,432			
16	$164,244	16	$1,579	3	16	2
19	$166,443	13	$1,541	4	2	3
22	$174,804	8	$1,366	8	20	27
23	$174,533	10	$1,353	9	9	24
26	$297,033	1	$1,233	10	6	20
27	$167,684	11	$1,524	6	25	17
30	$166,443	13	$1,527	5	5	23
32	$190,036	6	$1,597	2	24	9
37	$166,443	13	$1,172	11	21	25
40	$174,804	8	$1,457	7	26	19
42	$190,036	6	$1,743	1	27	22
TOTAL	$4,692,801		$988			

* These rankings are based on raw scores for attendance change.

Conclusion

The Dropout Prevention Program budget provided schools with resources that they probably would not have had otherwise. In this most general sense, expenditures did have an effect, by making available extra personnel, as well as non-personnel items such as supplies or money for trips. There was a moderate relationship between dollars spent and services provided to students, as reported formally in program records. This is consistent with our overall conclusions about program implementation -- that much effort was spent on seeing that staff were hired and activities were taking place. Some may conclude, however, that the relationship between costs and services was not as high as might be expected. Elsewhere in this report we have discussed some factors which might have reduced the effect of expenditures on services. These include different record-keeping practices (so that schools which in fact had similar levels of service delivery would appear on record to be quite different) and different amounts of effort (so that two comparable staff persons in different schools might deliver varying amounts of services), in addition to the different staffing levels which are presumably the primary cause of variation in total expenditures.

There was, nevertheless, no strong relationship between program services and outcomes for individual students, as reported in Chapter Six. Thus, it was not surprising to find no relationship between program expenditures and outcomes at the school level of analysis, even though there had been some relationship between school-level expenditures and services. Again, we believe this is the result of the program's general inability to link program activities to measurable outcomes. In the following chapter, we suggest some alternative ways of specifying program goals and activities that might provide a stronger link between the two. Without that tight coupling between services and outcomes, we can estimate how many additional services might be provided by additional dollars (at least within the range of expenditures for Year Three), but we cannot not draw any conclusions about the ability of marginal increases in program expenditures to produce increases in student outcomes.

Given the generally negative program outcomes, it might be the case that all schools would need considerably more resources before the support services featured in the Dropout Prevention Program could be provided consistently and intensively enough to result in real student gains. More importantly, decisions about program funding should be closely tied to plans that link projected program services directly to expected short- and long-term goals for students.

Chapter Eight

SUMMARY AND RECOMMENDATIONS

In the final phase of our evaluation of the middle school Dropout Prevention Program, we have analyzed a very rich collection of data obtained from the Office of Student Progress, the Office of Research, Evaluation, and Assessment, and from the fieldwork efforts of our own evaluation staff. The data include Monthly Summary of Service Reports (MSSRs), Pupil Personnel Committee (PPC) decision sheets, OSP site visit reports, Teachers College observations, a Teachers College survey of DPP staff, and OSIS/OREA statistical data on student characteristics and outcomes.

Overall, the Dropout Prevention Program has shown a greater capacity so far to employ auxilliary staff and implement attendance outreach, counseling, and alternative education services than to improve students' attendance and percent of courses passed. Analysis of the data has revealed a number of unintended and unwanted outcomes. The results demonstrate the need for a major reconfiguration of the dropout prevention effort. This process, in fact, has already begun, as preliminary information from this evaluation has been used to draw up guidelines for the 1989-90 New York City Board of Education School and Community-Based Organization Partnership Programs.

Students in the Program

Twenty-nine middle schools continued to participate in the Dropout Prevention Program during 1987-88, including eighteen in which services were provided exclusively by Board of Education personnel (the School-Alone or SA model), and eleven in which services were provided jointly by Board personnel and staff of a community-based organization (the CBO model). Each program site was expected to enroll at least 150 students; community-based organizations were contracted to serve 100 students per school in the CBO model.

* A total of 4752 middle school students were enrolled in the Dropout Prevention Program during 1987-88.

* The average number of program students was 185 for schools in the School-Alone model, and 129 for schools in the CBO model.

It appears that program enrollment was lower in CBO schools because in those schools Board of Education staff did not enroll many students beyond those which the community-based organizations worked with. In some schools, especially in the SA model, new students who met eligibility requirements for the PCEN alternative education program were added to the program roster in addition to those previously targeted.

Attendance and Achievement Outcomes for Program Students

Program guidelines stated that at least half of the students should show improved attendance in 1987-88, and half of the students who had failed at least one course in 1986-87 should pass at least one more course in 1987-88 than they had the previous year.

* The average attendance change for program students was -3.4%, the equivalent of a decline in attendance of about 6 days a year. Average attendance fell from 77% in 1986-87 to 74% in 1987-88.

* Overall, 47% of the program students improved their attendance, with an average improvement of +9.4%.

* The average change in proportion of courses passed was +1.8%, the equivalent of passing about one-tenth of a course more in a year. The average proportion of courses passed by program students was 70% in 1986-87, and 73% in 1987-88. (The numbers do not correspond exactly because students missing data for one or both years are not included in the change score.)

* Of those students who had failed at least one course in 1986-87, 63% met the objective of passing more courses the following year. The average change for these students was +40%, or about two courses per year.

* Of *all* students in the program, 37% passed more courses in 1987-88 than they had the previous year, 32% passed fewer, and 31% stayed the same.

* These outcomes are more consistent with findings from the first year of the Dropout Prevention Program, when student attendance declined -4% and courses passed increased +1.5%, than they are with second year outcomes, when student attendance declined -1.6% and courses passed increased by +4.2%.

* As was concluded in Year One, the attendance change for program students is about what would be expected in the absence of a program. The Year Three attendance change of -3.4% is about the same as a -2.9% loss that has been found for a control group of 2285 students who were located in the same 29 schools in 1987-88 and who were eligible for services on the basis of prior low attendance but were not enrolled in the Dropout Prevention Program. The courses passed outcome for Year Three suggests that, overall, the program may have prevented a further

deterioration of courses passed.

* The attendance and courses passed outcomes do not indicate either sufficient gains for the typical student or increased success for the program over time.

* While reading and mathematics achievement test scores were not specified as outcomes for the DPP, much of the effort to implement program in 1987-88 revolved around establishing PCEN classes for DPP targeted students. Students who received PCEN reading instruction had gains on the Degrees of Reading Power (DRP) Test that were higher than expected for middle school students and higher than the gains for students who did not have PCEN reading.

* Students who had PCEN mathematics remediation in combination with reading or writing, but not students who had mathematics remediation alone, gained more on the Mathematics Achievement Test (MAT) than students who did not have mathematics remediation; students who had mathematics remediation alone or who had no remediation of any kind gained about what would be expected in a year's time.

Implementation of the Dropout Prevention Program in 1987-88

Uneven progress was made toward effecting the changes in the DPP that were mandated for 1987-88 in Chancellor's Circular #37.

Only 13 of the 29 schools used a full-time facilitator, including none of the 11 CBO model schools.

* Full-time facilitators saw their job as much more doable than did part-time facilitators, including having time for relationships with students. A very slow process of budget and expenditure approvals was often an obstacle to timely and cost-efficient accomplishment of goals, whether facilitation was a full- or part-time staff position.

Pupil Personnel Committees functioned in all 29 schools and in many of the schools were appraised by staff as very valuable for planning interventions for students. Decision sheets (i.e., structured minutes) from meetings of the Pupil Personnel Committee in 20 schools were analyzed; they recorded discussion of 677 individual student cases -- 334 males and 343 females.

* Home problems and health and pregnancy or child-care were the most frequently cited reasons for girls' absences or deficient school performance, while home problems and in-school discipline problems were the most common issues cited for boys. Other than low

grades as such, academic problems (usually low standardized test scores) were infrequently mentioned. Teachers were never cited as contributing to students' inadequate school performance. It is clear that the schools had to deal with extraordinary conditions in the students' lives. At the same time, the emphasis on these conditions--at least in the PPC records--indicates an approach in which the students, not the schools, needed to be changed or healed.

Home visits were increased and schools carried out parent participation activities, but staff in only a few of the schools felt that they had involved parents substantially.

A Health Service Coordinator was on staff in all but two of the schools, but coordination of health services with DPP was minimal in most schools.

Due partly to the late approval of the high school budget for linkage, high school linkage started very slowly in the fall semester and less than half of the students participated in even one linkage activity.

* For those students who experienced it, "shadowing" high school students during a school day was reported to be a particularly valuable activity.

A Pupils with Compensatory Education Needs (PCEN) program of remedial instruction in reading, math, and/or writing was implemented in 26 of the schools. From a funding standpoint, PCEN was not a DPP component. However, Circular #37 linked it with DPP's alternative education programming. In order to meet New York State requirements for PCEN, not fully legislated until August, 1987, many of the schools had to change earlier plans for alternative education.

* Selection and programming of eligible students, appointments of teachers, securing appropriate materials, and approvals of budgets for PCEN absorbed much of the energy of school staffs and OSP, and was not completed until November or later in half of the schools. Both OSP and Teachers College observers found very variable quality and attendance in the PCEN classes observed.

An extended day program was implemented in 26 of the schools, and enrichment courses complemented the PCEN courses in eleven schools. The extended day programs included remediation, enrichment, enterprise, and/or recreation. Enrichment especially emphasized career education.

The Office of Student Progress conducted a very thorough monitoring and documentation of the implementation of the program. OSP carried out both enforcing and facilitating roles. The development of an Incentive Point System in all of the

schools combined general OSP guidelines with school-level discretion in a way that demonstrated the potential for mutual decision making. OSP's intention to develop alternative education in a similar way was subverted by New York State's late and narrow specification of PCEN requirements.

* Whether or not OSP's re-doubled emphasis on procedures and numbers was valid--which many DPP staff in the schools doubted--is a question to be answered partly by the results DPP produced in 1987-88.

Recorded Services to Students

A Monthly Summary of Services Report was completed for at least three months for 4752 students in the 29 DPP middle schools. From OSP's examination of the documentation for a sample of the records, it can be concluded that the MSSRs are sufficiently reliable to allow comparisons of types of services to different categories of students within and across schools, although there were school-to-school variations in documentation.

* The largest numbers of services recorded were Telephone (7.7 per student for the year) and Mail (7.1), which added together with Auto Dialer calls (0.9) accounted for about 38% of all services. The next largest category was Extended Day (5.4), followed by Individual Student Guidance (4.5), Home Visit (4.0), Student Conference (3.5), and Group Guidance (3.2).

* Relatively few Attendance Incentives (1.9) were recorded, while High School Linkage (0.7), Parent Guidance (0.5), Health Record Review (0.4), Vision Screening (0.2), Hearing Screening (0.2), and Physical Examination (0.03) were all in a very low range.

The services that involve direct contact with a student: parent conference and parent guidance (often the child is present), student conference, individual guidance, group guidance, attendance incentive, extended day, high school linkage, physical examination, vision screening, and hearing screening, were added together in the category of Direct Services. The category of Indirect Services included the sum of mail contact, telephone call, TELSOL automated phone dialer call, home visit, and health records check.

* Direct services totaled 20.7 for the average targeted student in 1987-88. Indirect services totaled 20.1 for the average student.

* The monthly average of both direct services and indirect services was highest between January and

March, lower between September and December, and lowest between April and June. High school linkages, which were highest in the second half of the year, were an exception to this general pattern.

Some students were scheduled for PCEN remedial instruction and/or enrichment classes as part of the DPP alternative education component. Because these students took the class(es) with other DPP students, they were considered to be participating in a DPP Instructional Cluster.

* Students who were clustered in PCEN and/or enrichment classes received substantially more services than students who were not scheduled for PCEN or enrichment.

* For 2601 students who were in a cluster, the monthly average of direct services was 3.0; for 2151 students who were not in a cluster, the monthly average of direct services was 2.0. This may have reflected the fact that it was easier to access students through their being in a cluster.

* Clustered students received an average of 2.8 indirect services per month, while not-clustered students received an average of 2.3 per month. It is more difficult to understand why clustered students would have received more attendance outreach, given that their attendance in 1987-88 was substantially higher than that of not-clustered students.

The pattern of clustered students receiving more services than non-clustered students applied equally in the CBO and the SA schools, which suggests how similarly CBO and SA staff accessed students in the schools.

* Students in CBO model schools received an average total of 26.0 direct services during the year, while students in School-Alone model schools received an average total of 20.7 services. Only a sixth of CBO students received fewer than 6 direct services in the year, compared to a quarter of the SA students. However, these figures reflect the generally lower number of students served in the CBO schools. The total number of direct services recorded in the average SA model school (3407) was about the same as in the average CBO school (3354).

* Students in both CBO schools and SA schools received an average total of 20.1 indirect services. The average total for all students in a CBO school was 2593 indirect services recorded, while for an SA school it was 3718. These latter figures might reflect the level of activity of Board of Education employees in the CBO schools as much as that of CBO employees themselves.

Regression Analyses

We have carried out a variety of regression analyses to try to determine the contributions of different program components or characteristics to outcomes. We were particularly concerned to understand the factors influencing outcomes for students clustered in PCEN and/or enrichment courses, for two reasons: first, as was described above, these students received more services than students who were not clustered, and second, these students had better outcomes on attendance and courses passed than other students.

* Program outcomes differed according to whether students were scheduled for special DPP instructional classes. Attendance changes were the following:

  -1.7% for students in DPP/PCEN remedial instruction classes;

  +0.5% for students in DPP enrichment classes;

  +1.3% for students in both remediation and enrichment; and

  -6.6% for students receiving neither remediation nor enrichment.

  Changes in courses passed were the following:

  +0.3% for remediation students;

  +5.9% for enrichment students;

  +17.1% for students receiving remediation and enrichment; and

  -0.4% for students receiving neither.

* Students in these different instructional clusters had similar attendance in 1986-87, but very different attendance in the fall of 1987-88, as well as different average scores on standardized reading and math tests and different histories of course performance. It was, therefore, important to examine what was contributing to the disparate outcomes.

Controlling on prior year (1986-87) attendance, we have examined the effect of the different program services, as well as PCEN and enrichment course enrollment, on 1986-87 attendance. We also used the monthly records of student attendance and services received, recorded on the MSSR forms, to examine the effect of student attendance and services in one month on attendance in later months. These analyses demonstrate the following:

* Early current year attendance adds significantly and substantially to the prediction of later current year attendance after controlling for prior year attendance.

* In a given month, direct services are given slightly more frequently to students with better attendance, while indirect services (i.e., attendance outreach) are going to students with low attendance. Student attendance in one month is highly correlated with attendance the following month; for program students overall, neither direct nor indirect services appear to have any impact on this pattern.

* Overall, it appears that attendance differences for students in PCEN remediation classes compared to students in enrichment alone, enrichment and remediation, or neither, reflect differences in the attendance of the various groups in September, before the remediation and enrichment programs were implemented in most of the schools. The remediation and enrichment programs selected students who were more available in the early fall, and did not alter their attendance patterns, even though these students received more program services than other students did. There is no evidence that the PCEN or enrichment classes themselves have any effect on attendance above and beyond the effect of students' prior attendance.

* After controlling for students' prior year attendance, the number of program services received, and enrollment in an instructional cluster, the particular school in which a student was enrolled explained an additional 6% of the variance in 1987-88 attendance.

Controlling on 1986-87 subjects passed, we have looked at how much of the variance in 1987-88 subjects passed is accounted for by student attendance and the different service and program components. We have successively entered a) 1986-87 courses passed, b) September-October 1987 attendance, and c) November-January services and PCEN/enrichment program, to predict 1987-88 courses passed. These analyses indicate the following:

* Current year attendance is the strongest predictor of courses passed.

* Direct services are not significantly associated with variance in courses passed, but indirect services, consisting largely of attendance outreach, are negatively associated with courses passed.

* Neither PCEN nor enrichment adds substantially to variance that is explained by prior attendance or

attendance outreach.

* After controlling for prior year courses passed, services received, and enrollment in an instructional cluster, the school which a student attended explained an additional 7% of the variance in 1987-88 courses passed.

In examining the findings for students in instructional clusters, we found two further patterns in the fall attendance data that were very striking. They are as follows:

* Clustered and non-clustered students had large differences in their September, 1988, attendance, but much smaller differences in their total average attendance the prior year (1986-87). It is possible that some factor in the students' personal or home situations over the summer, or in their initial school-year experiences, intervened, so that students became differentiated as good attenders vs. poor attenders quite early in the school year.

* The attendance of every group of students (i.e., students receiving remedial instruction, enrichment, both, or neither) was highest in September (85.2% overall) and declined regularly, month by month until February, when it picked up some with the start of the new semester. Personal or home problems alone cannot account for these systematic declines.

It may well be that only an experimental design, in which a random group of students do not receive the services of a program, could detect a positive effect for program services, particularly attendance outreach, on attendance. Attendance outcomes for a comparison group of students who were eligible for services on the basis of 1986-87 attendance, but who were not in DPP or AIDP, are currently being calculated by OREA.

Differences in Outcomes for Schools, Districts, and Models

The outcomes we have presented above represent aggregate scores averaged across all program students and across all program sites. These figures mask considerable variation in outcomes.

* Individual schools had average attendance changes that ranged from -9% to +3%.

* Schools had average changes in courses passed that ranged from -11% to +28%.

* Only half of the schools that had been identified as exceptional gain schools in attendance or courses passed in 1986-87 maintained this position in 1987-88.

* The school with the highest outcome in courses passed also had the third highest attendance change. This school had also shown strong gains, relative to the other schools, in the second year of the program. The dropout prevention program in this school was characterized by several important features: all program students were block-programmed; career education activities were incorporated in the curriculum; teachers and DPP staff ate lunch together every day; program staff kept very close track of students' attendance throughout the school day; and the program involved large numbers of parents in dinners and health workshops.

* Another school that had positive attendance and courses passed outcomes in Year Three had steadily improved its ranking for both outcomes during the three years of the DPP. The Pupil Personnel Records from this school evidenced a problem solving approach to the implementation of program, particularly to increase attendance in a homework helper program.

* A school which had the largest attendance gain of all 29 schools in both 1986-87 and 1987-88 had major changes in its DPP program between the two years but in each year created channels for positive attendance outreach to students. These included a strong incentives program, especially trips, in Year Two and a strong PCEN mathematics program, in which all DPP students were enrolled, in Year Three.

* Outcomes also differed by district. In the highest-achieving district, all three schools provided enrichment classes for program students, and two of the three had very high parent involvement.

* There was no difference between schools in the School-Alone model and those in the CBO model on attendance; both had an average attendance change of -3.4%.

* The average change in proportion of courses passed was +2.8% for schools in the School-Alone model, and -0.3% for schools in the CBO model. All of the difference is accounted for by students in the School-Alone model who received enrichment classes; when they are removed from the analysis, the outcomes are virtually identical for the two models. Students receiving enrichment instruction differed from other program students: they had higher prior year attendance, as well as higher prior year courses passed. Most decisively, they were probably selected for enrichment instruction on the basis of higher prior year scores on standardized achievement tests

(which rendered them ineligible for PCEN remedial instruction) and higher attendance in the early part of the school year.

Variations in Outcomes for Students with Different Background Characteristics

Program students varied considerably in their background characteristics and prior academic histories. In several cases, outcomes varied systematically for different groups of students.

* Male and female students had comparable prior year attendance rates and had virtually the same loss in attendance, -3.4%.

* Males passed 69%, and females passed 76%, of their major courses in 1987-88. The change in courses passed over prior year rates was +1.3% for males, compared to +2.4% for females. This difference occurred even though their school attendance and performance on standardized achievement tests were comparable.

* Different attendance-and-courses-passed patterns for males and females, together with the patterns of different issues being discussed for male and female students in Pupil Personnel Committee meetings, show that both the students' own behavior and staff's interpretations of student cases reflected strong differences in performance and expectations by sex.

* The more students were overage for grade level, the more attendance they lost. However, course performance findings suggest that overage students who were repeating a grade level in 1987-88 tended to pass more courses the second time around.

* Students who met the Board of Education's criteria for limited-English proficiency (i.e., scoring below the 20th percentile on the Language Assessment Battery) had an average attendance decline of -4.1%, and an increase in courses passed of +8.1%. It is likely that the gain in courses passed is attributable to the schools' provision of special language instruction services for these students.

* Additional students were determined to have limited English proficiency on criteria slightly more expanded than the Board's own criteria (i.e., scoring between the 20th and 40th percentile on the LAB or taking a standardized achievement test in a non-English format). These students had an average attendance loss of -5.3% and a loss in courses passed of -0.3%.

* Limited-English proficient students, including those who met the Board's criteria and those otherwise deemed to have limited English language skills, received disproportionately low numbers of program services. They also were enrolled less frequently in the PCEN or enrichment classes where students tended to be more available to program staff and thus received more services.

Middle School Program Costs

Total costs for the middle school Dropout Prevention Program during 1987-88 were $4,692,801. When fringe benefit costs are excluded from the total (because they were not included in the Year 2 analysis), total costs show an increase of 8.4% over 1986-87 expenditures. Costs were distributed unevenly across districts, ranging from a low of $333,420 in District 17 to a high of $544,316 in District 3.

* Average district-level expenditures were $443,383 for districts in the School-Alone model, and $508,126 for districts in the CBO model.

* Per-pupil costs averaged $798 per pupil in the School-Alone model, and $1,432 per pupil in the CBO model.

One reason for the disparity in total costs and per-pupil costs between the School-Alone and CBO program models is that CBOs had more success than schools in filling personnel positions, and keeping them filled, even though they may have had increased staff turnover. Another reason is that schools in the School-Alone model tended to increase their student enrollment in order to obtain two types of alternative education program funding -- AIDP funds for enrichment/career education, and PCEN funds for remedial instruction. Schools in the CBO model, on the other hand, had fewer funds at their direct disposal (e.g., for alternative education instructors) because of the funding for the CBOs, and therefore had less incentive to enroll more students.

* There was a relationship between per-pupil costs in a school and average total services per pupil. Costs were able to explain about 30% of the variance in average total services per pupil. There was, however, no relationship between total program costs per school and total number of services delivered.

* There was no relationship between program costs and performance outcomes.

Observations and Recommendations

An extended discussion will be required to pull together many lines of reasoning about the causes and implications of the findings we have cited. We offer here a few main observations and recommendations.

In the absence of a directive to change the core academic experience of students in the middle schools, there has been less reason to anticipate that DPP would substantially affect the number of courses passed by students. On the other hand, this variable is potentially more susceptible to program influence than is attendance, in the first place because teachers have more control over students' grades than they do over their attendance. The program has made an effort to provide alternative instructional experiences for students, largely through basic skills instruction and enrichment add-ons. The PCEN reading course produced some gains on the DRP; but PCEN mathematics, offered to more students than was reading, did not result in achievement test gains in most schools; and neither PCEN reading nor mathematics contributed to an instructional program that is *generally* better and more compelling for students.

* The program design does not acknowledge the need for a comprehensive restructuring of students' school experiences, and therefore has not yet addressed the central issue.

There is some evidence from the program that when students increase their attendance by more than about ten percent, their course performance also improves. However, attendance changes of this magnitude are happening for very few students. Furthermore, courses passed can improve independently of attendance, provided instructional issues are addressed. This is demonstrated by the fact that courses passed improved for students who were eligible for bilingual education despite their having an attendance decline.

* Although the academic performance of students improves as their attendance goes up, attendance improvement alone is not sufficient to achieve meaningful gains in the number of courses passed.

Community agencies were intended to introduce new patterns of interaction with students and families, arising from their experience with neighborhood and cultural or racial-ethnic issues and resources. Instead, over time CBOs have become less distinguishable from the school programs themselves. Minority personnel predominate in attendance outreach in both models, while both minority and non-minority personnel are employed in counseling and facilitating or supervisory positions in both models. CBOs have adapted to school operating procedures to gain access to students in school, and they may not be relating to students in the same way that they would on their own or a

different turf.

* It cannot be said that community-based agencies make either a positive or a negative contribution to dropout prevention efforts, only that the collaboration has not yet resulted in observable differences in how students are served relative to schools without CBOs, or in improved performance outcomes for students. This does not rule out CBOs working effectively in individual schools, but it does say that there is not at this point in time a general CBO effect on students.

* Program budgets were much higher in schools using CBOs, while target populations were smaller and total number of services delivered was the same (direct) or smaller (indirect services). In order to achieve a cost-effective balance, student enrollment and service delivery goals for schools collaborating with CBOs should be reviewed.

In order to experience school success, students also require health services, personal counseling, crisis intervention, and social welfare referrals. The Dropout Prevention Program does both too little and too much here. First, the level of services in these areas (except perhaps crisis counseling) is too low to have more than a superficial impact on students' lives. Second, these problems are often considered by program staff to be the primary cause for poor school performance. Thus, not only do staff lack the skills and resources to adequately address some of these problems, but also their interpretation of them deflects the focus away from school factors that the program should be in a position to change.

Primary control over planning, budgeting, and monitoring of services and activities was exercised by central program managers. This was intended to ensure faithful program implementation and increase the likelihood of good outcomes. In fact, other very different consequences were observed. Delays in budget approval and appropriation of funds caused severe breakdowns or delays in service delivery. Documentation requirements were not necessarily excessive, but they were geared to external categories and quotas of services and were not directly related to school staff's own need for information to help them reach program goals.

* Local program personnel need to be held accountable for meeting the large, long-term goals of the project: to increase student attendance and academic performance over the course of one or more school years. They should be given a wide range of options in deciding how to pursue those goals and what short-term objectives to target on the way. Central program managers should help them along the way with information, training, etc., and should hold them to

reasonable long-range goals, but otherwise should share control with local personnel. More specifically, we recommend the following:

1. The schools should attempt to have fundamentally positive communications with students and their families. DPP staff in each school should review their attendance outreach functions and parent participation activities and concentrate on those that seem to result in the most positive interactions. School staff generally should look for opportunities for positive communications with students and their families, particularly trying to build up a reservoir of positive exchanges before sending negative information to the home.

2. Given that students' highest rate of attendance is in September and that attendance early in the year is highly predictive of attendance and courses passed later in the year, the schools must be ready to welcome students with an engaging program and supportive services from the beginning of the school year in September.

3. Schools should build their instructional programs on students' perceptions of the instruction that they find most helpful to them for learning. School staff could consult with one another to identify those practices that students perceive are teaching them. The evaluation's observations and interviews of students suggest that these practices include a combination of direct instruction and hands-on activity, with teachers taking time to explain things patiently to students.

4. The schools need to take much stronger measures to facilitate middle school students' orientation to high schools. The Board of Education should develop information sources that students themselves can readily access: videotapes about the individual high schools and more readable directories, for example. Borough and community school district administrators need to facilitate more extensive opportunities for middle school students to learn from high school students and staff, in the high schools and in the middle schools themselves. High school orientation needs to be integrated more closely with students' planning for their futures, beginning early in the middle grades.

5. Schools need to assess the adequacy of their counseling and health resources, both to rationalize the best use of the resources they

already have, directly or through referral, and to inform city and state authorities of the needs of students in the schools.

6. Schools need to decide what information about student performance and services to students will best aid them in reaching dropout prevention goals. The Board of Education should work with the schools to develop ways of obtaining and updating this information, including computers and computer programs for student information where appropriate. Advisory and coordinating roles need to be expanded for teachers, and more tax-levy teachers need to be included on Pupil Personnel Committees.

7. Central and borough or district Board of Education personnel should share expertise and decision-making power with local school personnel in all of these matters. Long and short range goals should be set within a framework of mutual respect and accountability.

Obviously, while Teachers College has been analyzing Year 3 data, the Dropout Prevention Program itself has been moving through a fourth year which is not part of the Teachers College evaluation. It is possible that some of the findings we are reporting were anticipated by program personnel and that this has already resulted in program adjustments and improvements. We do know that some of the recommendations above are currently reflected in Board of Education plans for 1989-90.